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ABSTRACT

Longitudinal enrollment data and policy information collected via three surveys between 1988 and 1990 of all states were used to profile the status of secondary school student participation in vocational programs in the United States. Participation was examined through analysis of high school and vocational enrollment trends between 1982-83 and 1989-90. These trends were then compared to changes in the states' educational policy to reveal any potential relationships between trends and policy. Data were analyzed for two primary groupings of states: those with increasing vocational enrollments (19 states) and those with decreasing enrollments (31 states). Fourteen states in the first group showed declines in overall high school enrollments. Clearly three-fourths of the second group showed much steeper declines in vocational education. An examination of policy implementation and programmatic reforms suggested that states evidencing stable or increased vocational enrollments were characterized by proactive attempts to reform or restructure vocational education. (The 25-page report is followed by extensive appendixes, including the state survey instrument and state by state enrollment data tables. These tables show high school and total vocational enrollments as well as vocational program teaching area enrollments. Appropriate percentage of change statistics are also provided.) (YLB)

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National Center for Research in
Vocational Education

University of California, Berkeley

**U.S. ENROLLMENT PATTERNS
IN SECONDARY VOCATIONAL
EDUCATION: A STATUS
REPORT (1983-1990)**

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**U.S. ENROLLMENT PATTERNS
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REPORT (1983-1990)**

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EXECUTIVE SUMMARY

Longitudinal, extant enrollment data and policy information collected via three survey administrations between 1988 and 1990 to each state were used in this report to profile the status of secondary school student participation in vocational programs in the United States. Participation was examined through analysis of high school and vocational enrollment trends between 1982-1983 and 1989-1990. These trends were then compared against changes in the states' educational policy to reveal any potential relationships between trends and policy.

The report begins with a methodological section detailing the procedures used for collecting and summarizing the data for each state. Results are then reported via data analyses within two primary groupings of states: those with increasing vocational enrollments (19 states) and those with decreasing vocational enrollments (31 states). Of the nineteen states with increased vocational enrollments, fourteen showed declines in overall high school enrollments. On the other hand, for the thirty-one states with declining vocational enrollments, clearly three-fourths of these states showed much steeper declines in vocational education than in overall high school enrollments. An examination of policy implementation and programmatic reforms suggests that states evidencing stable or increased vocational enrollments are characterized by proactive attempts to reform or restructure vocational education—a task sometimes complicated by reform efforts aimed at the overall delivery of public education in the states. A brief discussion of the results focuses on the sustaining, although limited, power of vocational education when proactive or reform-oriented approaches to general education reform policies are pursued. The one, methodological concern of this study, data integrity, is suggested to be symptomatic of the generally resistant response of vocational education to reform activities. This resistance to change or to consideration of the impact that *nonreform* has had on vocational education clearly handicaps the ability of these programs to continue as a viable force in secondary education.

Data summaries in this report are supported by an extensive appendix. Appendix B provides the data table for each state that was used for preparation. High school and total vocational enrollments as well as vocational program teaching area enrollments are included on each table. Appropriate percentage change statistics are also provided.

INTRODUCTION

Public demand for education reform has resulted in the implementation of new or revised education policies which appear to have influenced secondary school students' participation in vocational education. As a result, the role of vocational education in the secondary school has come under increased scrutiny and questions have been raised as to the delivery and structure of programs.

While most studies of vocational enrollments focus on regional- or state-level impacts of education reform on vocational education, the National Assessment of Vocational Education (NAVE) looked at national trends in student choice relative to participation in vocational education. According to the NAVE study (Wirt, Muraskin, Goodwin, & Meyer, 1989), secondary students planning to continue their education took substantial amounts of vocational education. More specifically, students planning to attend postsecondary vocational-technical education accounted for 26.5% and four-year, college-bound students accounted for 47.9% respectively of all vocational credits taken by high school students. In contrast, work-bound students accounted for only 25.2% of all vocational credits and only 26.4% of all occupationally specific vocational credits.

In a study conducted by Gray (1990), evidence was found that declines in central Pennsylvania high school vocational education enrollments were attributable to a shift in student preference for college preparatory courses. Gray reported that between 1985 and 1988, high school graduates completing the academic curriculum increased from twenty-eight percent to forty-six percent. During that same period, vocational education enrollments declined thirty-two percent while overall high school enrollment had a reduction of only nine percent. Gray concluded that vocational education's role may be changing in light of graduates' increasing preference for continuing their education.

Rossetti (1990) had similar findings from a study conducted among eleventh graders not enrolled in vocational education courses. An analysis of survey data collected from five high schools located in southwest Ohio indicated that the most frequently cited reason for not enrolling in vocational education was planning to go to college.

Another factor to consider in examining vocational enrollment patterns is that of demographic shifts in the nation's secondary school population. Accompanying the decline

in the numbers of students enrolled in vocational education is a corresponding general decline in the secondary school population. According to a study by Strickland, Frantz, and Elson (1990), between 1984 and 1988 vocational enrollments declined in thirty-two states. In twenty of these states, this decline was about the same or greater than that for overall high school enrollment. In the remaining states with vocational enrollment increases, overall high school enrollments either decreased (twelve states) or increased at a lesser rate than vocational enrollments (six states). Apparently, in these latter instances, policies and practices were being used successfully to improve participation in vocational education.

This document reports on a nationwide, longitudinal program of research funded in part by the National Center for Research in Vocational Education (NCRVE). The purpose of this research was (1) to explore longitudinally the status of participation in secondary vocational education, and (2) to examine the impact of concurrent education reform policies and practices on vocational education. This document is strictly a descriptive report, summarizing data on secondary students' participation in vocational education and the corresponding policies and strategies that vocational administrators identified as having had an impact on such participation. Due to the limitations of data collection and the inconsistent reporting procedures across and within states, analyses for this report focused simply on the identification of trends in statewide secondary and vocational enrollments. A journal for each state documenting education reform policies and/or reform activities provided the data for examination of policies/practice given selected patterns of vocational enrollment.

METHODOLOGY

Development of the longitudinal database for this research program began with an existing database established through an earlier, independent research project conducted by Frantz, Strickland, and Elson in 1987. For that project, longitudinal enrollment data was collected through a mail survey to each state director of vocational education asking for consistent, extant data on enrollments in vocational education and enrollments in secondary education (grades nine through twelve) for their state between 1983 and 1987. Respondents were asked to document both the source and format of all data and to indicate a contact person for possible follow up to clarify questions on the data.

Verification of the Frantz, Strickland, and Elson extant database and continuation of the data collection efforts for the longitudinal project reported in this document were accomplished through the use of individualized survey collection forms for each state. The survey was administered each year between 1988 and 1990. The individualized state surveys were comprised of three basic parts: (1) a cover sheet with general instructions applicable for use with all state surveys; (2) an enrollment data edit sheet and an enrollment data page; and (3) a policy update or supplemental information form and policy journal page(s)—see Appendix A for one example of the data collection instrument used in the 1990 survey administration. The enrollment data edit sheet fashioned for each state noted discrepancies, inconsistencies, and general concerns relevant to previously reported data and requested sources for all data. In addition, the enrollment page was used to allow each respondent to record new information for more recent school years and to correct figures for previous years as needed. The policy update form instructed each state respondent to review the attached policy journal for his/her state and to update or revise the journal as applicable. In addition, questions related to policies or strategies implemented in the states were included as needed for clarification or follow-up given previous survey information.

While data verification and continued collection of more recent enrollment and policy data were the initial concerns of this project, the need to document further the various methods of reporting vocational enrollment statistics across the states quickly became evident. Whereas, this project did not mandate a standard measure of participation or enrollment in vocational education and its separate program teaching areas, data collection depended on the reporting of extant data available from the states. Nevertheless, the researchers did encourage states (1) to report high school, total vocational and vocational program teaching area enrollments for grades nine through twelve only; (2) to report that data which was most consistent over the time period requested; (3) to identify whether the reported enrollment data represented duplicated or nonduplicated counts; and (4) to provide the specific sources for all reported data.

For reporting purposes, vocational program teaching areas were designated as agriculture, business, health, nonoccupational home economics, occupational home economics, marketing, industrial arts and trade, and industrial education. This raised several issues of concern. First, given the time frame of the study, the transition of industrial arts programs to technology education made consistent reporting or documenting of these enrollments difficult. Early on in the project, many states had not made the change

from reporting industrial arts enrollments to technology education enrollments—hence, some confusion in how to request enrollment data for this teaching area. Additionally, many states reported that industrial arts or technology education programs were considered prevocational and, consequently, this data was not included in any total vocational figures. Most of these accommodations are documented in the footnotes of each state's data table (see Appendix B). However, some states did not respond to continued inquiry about the nature of reporting changes in this area. The documentation of reporting practices for this teaching area were limited. Other problems in reporting vocational enrollments by teaching area focused mainly on the issue of definition. For example, Indiana simply does not collect data by the teaching areas as designated in this project. Rather, vocational enrollments are collected by Classification of Instructional Program (CIP) codes which often did not easily collapse into the teaching areas as defined for this study. Finally, with the advent of technical education or Tech Prep programs, special needs programs, or other state specific program designations, the need to allow for reporting of other vocational teaching program areas was required. Each state data table includes footnotes indicating the definition of these other programs, their inclusion or exclusion in the state's total vocational enrollment figure, and other pertinent information as provided by the state.

The enrollment edit sheet and data page allowed for documentation of the type (i.e., duplicated, nonduplicated, or other) of enrollment figures available for a given state, as well as for information on sources. The latter was requested to enable the researchers to ascertain consistent reporting by each state in repeated survey administrations; however, this in no way *assured* consistent reporting of data. High school enrollment for most states was nonduplicated headcounts for grades nine through twelve. As for vocational enrollment data, three *general* patterns of reporting were revealed: (1) states which provided nonduplicated counts of enrollment in vocational education such that a student counted once in agriculture was *not* counted again in any other program teaching area including agriculture; (2) states which provided duplicated counts of enrollment such that a student enrolled in two agriculture classes and one business class was counted twice in agriculture and once in business; and (3) states with a mixture of both nonduplicated and duplicated counts where duplicated counts typically characterized reporting for nonoccupational program service areas (e.g., nonoccupational home economics and technology education) and nonduplicated counts characterized reporting for occupational program service areas (e.g., agriculture, business, and marketing). Such variances in reporting practices presents major obstacles to data analysis. For example, consideration of

the proportion of total secondary school students participating in vocational education is precluded when duplicated enrollments are reported for vocational education versus nonduplicated enrollments for the total secondary school figure. In this instance, reported vocational enrollments could be much greater than reported overall high school enrollments (see Nebraska, Georgia, and Florida data tables in Appendix B) and, hence, suggest that more than one-hundred percent of all secondary students participate in vocational education!

Other reporting concerns involved acquiring data for the same grade cohorts. Some states have high school membership data for grades nine through twelve, but vocational enrollments are aggregated for grades six through twelve or eleven through twelve or some other cohort grouping. Other states (e.g., New Mexico, Tennessee, Wyoming) were unable to report enrollments for grades nine through twelve alone, using instead grade levels six through twelve or seven through twelve. The most serious concern, however, has to do with consistent reporting methods over the data collection period. More recently, several states have revised their reporting procedures to include vocational enrollment in nonfederally funded programs. One state, Alaska, has only recently implemented a formal, systematic process of data reporting while other states have revamped their processes altogether (e.g., California, Florida, Montana).

Information obtained from the surveys and from follow-up contacts regarding data definition and documentation were recorded in a footnote file. These notes were appended to each state's data table for reporting purposes. More importantly, however, these notes were critical to decisions regarding analysis of trends and/or policy information. Each survey administration included these notes on the enrollment data sheets, and state respondents were asked to review these notes carefully for accuracy and completeness. Any changes made to the footnotes between survey administrations were cleared through the appropriate respondent.

In general, all survey forms and correspondence were sent to state directors of vocational education. However, various state directors often directed their surveys to a given individual in the state department—usually one who was responsible for data collection or administrative operations. In those cases, the research staff contacted the designated individual and/or the state director as needed regarding completion of survey forms and follow-up questions. Once a survey was received, it was screened for

completeness and internal compatibility. Care was taken to be sure that vocational totals for each year were based on similar subgroups of program teaching area enrollment. For example, in the event that new categories of vocational enrollment were included in more recent years that were not present or available during earlier reporting years, the more current data was revised to be consistent with the earlier data. Typically, the revisions simply meant the deletion of industrial arts and/or other categories (e.g., special needs, not elsewhere classified, and entrepreneurship) of enrollment from the more recent vocational enrollment totals. On the other hand, initiation of new programs garnering new enrollments in vocational education generally were not deleted from vocational figures given the state indicated these enrollments were appropriate for inclusion in the sum figure.

Because of the limitations in data reporting, it should be clear that analyses were limited to straightforward descriptions of the trends evidenced on a state-by-state basis. Obviously, the data reported in this document is not a reliable source of exact enrollment figures, but given the precautions noted in this report, it can be used to indicate enrollment *trends*. Once the data was reviewed and documented as thoroughly as possible, analysis of trends was possible. Several approaches were attempted to obtain a general measure for separating the states into like trend categories, including the overall percent change between base year and most current year data, the average annual percent change over the data collection time frame, and the year-to-year percent changes. Use of the overall percent change measure was problematic in that the base year and most current year of data was not the same for all states. In addition, limiting the measure of change to only two data points overlooked the incremental changes made year to year. Use of the average annual percent change allowed inclusion of all available, consistent data points for each state. This measure was used in conjunction with analysis of year-to-year changes in vocational enrollment to determine the most accurate depiction of trends given the data available. While the average annual percent change proved to be a more acceptable measure than the overall percent change between base year and most current year data, other alternative measures should continue to be investigated.

Based on results using the average annual percent change, states were divided into two primary groups: Group 1—those states in which vocational enrollments had *on the average* increased each year and Group 2—those states in which vocational enrollments had *on the average* decreased each year. The corresponding average annual percent change for high school enrollments was then determined for each state in Groups 1 and 2. Based on

the direction of their high school trends, the states were further divided into subgroups within Groups 1 and 2. In general, four subgroups were identified within each major group. State subgroups within Group 1 (states with increased vocational enrollments) included those states where high school enrollments had decreased (Subgroup 1); increased at a rate less than the rate of increase in vocational enrollments (Subgroup 2); increased at about the same rate as vocational enrollments (Subgroup 3); and increased at a rate greater than that for vocational enrollments (Subgroup 4). Subgroups within Group 2 (states with decreased vocational enrollment) included those states where high school enrollments had decreased at a greater rate than vocational enrollments (Subgroup 1); decreased at about the same rate as vocational enrollments (Subgroup 2); decreased at a lesser rate than vocational enrollments (Subgroup 3); and increased (Subgroup 4). Average annual percent changes in high school enrollments were computed to be comparable with that computed for vocational enrollments. In other words, if only three years of data for vocational enrollments were consistently reported, the average annual percent change calculated for both vocational enrollments and for high school enrollments was based on the same time frame.

Once the subgroups were designated within each group, a matrix for each group/subgroup was developed to highlight selected policy changes and practices in the states as reported in their policy journals. The matrix included four areas of information: (1) indication of changes in high school graduation requirements, (2) indication of the use of vocational courses as alternatives for credit in academic subjects, (3) indication of negative policy influences on vocational enrollments, and (4) indication of positive influences on vocational enrollments. While high school graduation requirements represent only one component in the whole maze of reform related strategies, it continued to be the major change made in most states over the time frame of the study. Vocational courses serving as alternatives for academic credit were found to be a piece of information coincident with that on graduation requirements.

RESULTS

Group 1 – States with Increased Vocational Enrollments

Based on analysis of the available data periods for each state, nineteen states were designated as falling into Group 1. These states were further classified into four subgroups based on relative trends in high school enrollment: (Subgroup 1) states where vocational enrollment *increased* and high school enrollment *decreased*; (Subgroup 2) states where vocational enrollment increased at a *greater* rate than high school enrollment increased; (Subgroup 3) states where annual percent changes in vocational and high school enrollments were *on the average about the same*; and (Subgroup 4) states where vocational enrollment increased at a *lesser* rate than did high school enrollments. These states are listed by subgroup in Table 1 with their average annual percent changes in vocational and high school enrollments.

Fourteen states were identified in the first subgroup (vocational enrollment increased and high school enrollment decreased). While Table 1 provides the average annual percent changes over all data years for each state, detailed information on year-by-year changes are available in Appendix B. Generally, analysis of year-by-year data for the states in Subgroup 1 supports their classification based on the average annual percent change.

Four states were in Subgroup 2 (vocational enrollment increase greater than high school enrollment increase). Observation of year-by-year data corroborate each of these classifications. Increases in vocational enrollments exceed that for high school enrollments by well over one percent.

While analyses prior to the 1990 data collection resulted in several states falling into this subgroup, the more recent data did not provide any observations in subgroup three. Percent changes needed to be within .5 units of each other to classify a state in this subgroup.

Subgroup 4 included states where vocational enrollments increased at a *lesser* rate per year, percentage-wise, than did high school enrollments. One state fell into this subgroup. Examination of year-by-year data suggested that vocational enrollments in Utah have increased over the last three years after several years of decline. Consequently,

vocational enrollments appear to be strengthened despite the apparent disparity in growth relative to high school enrollments.

Table 1

**Increased Vocational Enrollment Group:
Average Percent Changes by State Subgroups**

(Average percent changes were calculated from enrollment data
between 1982 and 1989 [as available])

Subgroup	State	Vocational Change	High School Change
Subgroup 1: Vocational Enrollment Increased and High School Enrollment Decreased	Alabama Arkansas California Delaware Georgia Hawaii Iowa Kansas Montana New Mexico Oregon Virginia West Virginia Wyoming	2.2 4.9 0.4 0.3 1.0 0.8 0.3 1.0 11.4 4.7 2.7 3.3 4.1 1.8	-0.8 -1.0 -0.4 -3.3 -0.9 -0.6 -2.7 -0.7 -1.2 -0.2 -0.5 -0.5 -0.8 -0.4
Subgroup 2: Vocational Enrollment Increase Greater Than High School Enrollment Increase	Florida Idaho Texas Washington	6.6 1.7 2.7 2.4	0.1 0.3 1.4 0.3
Subgroup 3: Vocational Enrollment Increase About the Same As High School Enrollment Increase	None	None	None
Subgroup 4: High School Enrollment Increase Greater Than Vocational Enrollment Increase	Utah	0.6	2.7

Group 2 – States with Decreased Vocational Enrollments

Thirty-one states and the District of Columbia were identified as experiencing decreased vocational enrollments over the available time frame. These states were further classified into four subgroups relative to high school enrollment trends in these states. The subgroups were identified as: (Subgroup 1) states where vocational enrollment decreased at a *lesser* rate per year than high school enrollment decreased; (Subgroup 2) states where overall changes in vocational and high school enrollments were *on the average about the same*; (Subgroup 3) states where vocational enrollment decreased at a *greater* rate than high school enrollment decreased; and (Subgroup 4) states where vocational enrollment *decreased* and high school enrollment *increased*. These states are listed by subgroup in Table 2 with their average annual percent changes in vocational and high school enrollments.

Three states and the District of Columbia were identified in the first subgroup (vocational enrollments decreased at a lesser rate than did high school enrollments). It should be noted that New Jersey data was only reported up through 1987-1988. Recent changes in education policy in that state may not yet be reflected in the enrollment figures available for this report.

Five states were determined to be in Subgroup 2, where annual percent changes in vocational and high school enrollments were, on the average, about the same. Average annual percent changes for these states were generally within 0.3 percentage points of each other. Four of these states evidenced somewhat greater vocational declines on the average than high school declines. However, examination of year-to-year data made it difficult to determine whether or not vocational enrollments would continue to exceed the rate for high school enrollment declines or would begin to improve upon the high school rate.

Subgroup 3 included twenty-one states where the average annual percent decline in vocational enrollments was greater than that for high school enrollments overall. The differences in rate of decline ranged from a low of .6 (Missouri) to a high of 11.1 (Massachusetts). Two states were identified for Subgroup 4 where vocational enrollments decreased while high school enrollments increased.

Table 2

**Decreased Vocational Enrollment Group:
Average Percent Changes by State Subgroups**

(Average percent changes were calculated from enrollment data
between 1982 and 1989 [as available])

Subgroup	State	Vocational Change	High School Change
Subgroup 1: Vocational Enrollment Decrease Less Than High School Enrollment Decrease	Distict of Columbia Louisiana New Jersey Oklahoma	-1.0 -0.1 -1.8 -0.3	-4.0 -1.1 -2.9 -0.9
Subgroup 2: Vocational Enrollment Decrease About the Same As High School Enrollment Decrease	Maryland Mississippi North Dakota Tennessee Wisconsin	-3.3 -1.4 -1.5 -0.8 -2.3	-3.0 -1.1 -1.2 -0.8 -2.2
Subgroup 3: Vocational Enrollment Decrease Greater Than High School Enrollment Decrease	Alaska Colorado Connecticut Illinois Indiana Kentucky Maine Massachusetts Michigan Minnesota Missouri Nebraska New Hampshire New York North Carolina Ohio Pennsylvania Rhode Island South Carolina South Dakota Vermont	-3.8 -1.6 -7.9 -3.6 -1.8 -2.6 -3.4 -9.9 -3.9 -2.9 -2.0 -0.8 -2.5 -3.8 -0.9 -1.8 -9.7 -8.5 -2.4 -1.6 -6.3	-2.4 -0.8 -5.9 -1.2 -1.1 -0.3 -2.1 -3.9 -2.6 -1.3 -1.4 -0.1 -0.9 -2.7 -0.2 -1.3 -2.7 -3.9 -0.6 -0.2 -0.7
Subgroup 4: Vocational Enrollment Decreased and High School Enrollment Increased	Arizona Nevada	-1.1 -1.0	1.2 1.1

Impact of Policy

A summary of the policy/practice highlights for each state by group/subgroup is provided in Tables 3 and 4. Table 3 summarizes data for state subgroups within Group 1, the increased vocational enrollment group; Table 4 summarizes policy data within Group 2, the decreased vocational enrollment group. Briefly, it was determined that states in Group 1, the positive vocational enrollment group, generally evidenced the following policy activities or practices:

- 2+2 programs, advanced credit, articulated programs—that is, "aggressive pursuit of secondary/postsecondary agreements."
- Exploratory, cluster, orientation or career preparation programs in middle schools or grades nine through ten.
- Accreditation standards requiring vocational education availability (or at least access).
- Flexible scheduling and restructured programs.
- Integrated vocational/academic curricula efforts.
- Recognition of vocational education in graduation requirements or as alternatives for academic credit.

For states within Group 2, the negative vocational enrollment group, it was not just a matter of evidencing a different set of factors but more a matter of *not* evidencing those factors noted for the increased vocational enrollment group. Nevertheless, several common features, listed below, were indicated by these states as factors in the negative growth of vocational enrollment:

- Academic bandwagon emphasis in development of new graduation requirements or accreditation standards.
- Traditional, vocational programs, multiyear programs, three to four hour block courses, travel time to vocational training centers (VTC).
- Increased postsecondary entrance requirements.

Table 3
Increasing Vocational Enrollments: Policy Summary by State Subgroups

Subgroup 1	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
AL	Requirements increased; vocational education required	Business Math/English		Flexible scheduling and new approaches
AR	Requirements increased	Technical education and other vocational education for social studies		State initiative for at-risk students; career orientation required in grades seven and eight; twelve units vocational education must be offered in accredited schools; State standards require access to three occupational programs in each LEA
CA	Requirements increased; no vocational education required	Very limited		Policies to develop and sustain program quality have been initiated
DE	Requirements increased; no vocational education required	Local option (typically Business Math or Agriculture Science)	Block programs and school schedules conflict, hinder students from enrolling—but . . .	2+2 programs, exploratory programs, special needs enrollments Area VTCs being made full-time—reduces travel time and scheduling conflicts
GA	One unit vocational education or arts required	Local option	Graduation requirements	
HI	Requirements increased; no vocational education required	None after 1988—had included vocational education, technical education, and electronics		2+2 program, exploratory/orientation programs
IA	Minimum requirement of at least five units of occupational education	Local option		Exploratory cluster programs, eight-period day, articulation emphasis
KS	Requirements increased; no vocational education required, but nine electives required			Integrated vocational education and academics: Principles of Technology, Applied Mathematics, Applied Communication

Table 3 (cont.)

Subgroup 1 (cont.)	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
MT	Requirements increased; no vocational education required	Business Math/English	Agriculture decreased	Postsecondary requirements; Vocational education may substitute for foreign language; state project on vocational education expected to have major effect on vocational education
NM	Requirements increased; no vocational education required	Underdeveloped	Increase in academic requirements and decrease in electives; GPA of 2.0 required for extracurricular activities	State Department of Education beginning to recognize vocational education in lieu of basics such as mathematics and English
OR	Requirements increased; no vocational education required, but vocational education is one of three options for required elective	Local option—usually agriculture for science (many choose this option)		Articulated programs, advanced credit, 2+2 programs
VA	Requirements increased; one unit of vocational education included	Yes	Additional requirements for college-bound students	Transfer credit policy
WV	Requirements increased; vocational education is one of three options for a required elective	Agriculture for science	Disadvantaged students miss out on vocational education because of stricter graduation requirements	State requires certain electives to be available in all schools
WY	Local option—most exceed state recommendation	Some locals looking into this		Two vocational education programs required in each school per accreditation standards; move away from exploratory to occupational in high school

Table 3 (cont.)

Subgroup 2	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
FL	One unit of vocational education required	Yes		New graduation requirements seen as increasing basic skills of all (including vocational education) students; career preparation program
ID	Requirements increased; partial alternative for humanities	Agriculture for science; marketing for economics	Extended course schedules	Flexible scheduling
TX	Requirements increased; no vocational education required—requirements not seen as having impact on vocational education	None		
WA	Requirements increased; one year occupational education required—does not necessarily include approved vocational education courses	Local option—typical in most LEAs		2+2 programs, marketing programs

Subgroup 3	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
None				

Subgroup 4	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
UT	Vocational core part of high school requirements	Underdeveloped		

Table 4
Declining Vocational Enrollments: Policy Summary by State Subgroups

Subgroup 1	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
DC	Requirements increased; no vocational education required	Math and science credits through integrated vocational courses	Restructuring of school system; lack of support	"Shared-time" schedules; concerted recruiting efforts
LA	Requirements increased; no vocational education required	Business Math, Business English, Data Processing	Decrease in electives; four-year programs; cooperative programs; requirements impact on electives when required course is failed	
NJ	1987—one unit vocational education or arts required (not fully implemented during survey)	None		
OK	Requirements increased; no vocational education required	Vocational Agriculture or Home Economics by local option	Postsecondary entrance requirements	Technical Education programs: Principles of Technology; Basic Skills Project

Table 4 (cont.)

Subgroup 2	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
MD	Requirements increased; one unit partial alternatives required	Local option	Some local requirements are greater than state requirements for graduation	
MS	Requirements increased; no vocational education required	None	Performance-based accreditation system was academics only—ignored vocational education	
ND	Requirements increased state and locally	None	Students opting for other electives; decline in high school enrollment; poor economy (farms/energy field)	Postsecondary enrollment increased; more than one level course can be taught in same period; implementation of Principles of Technology
TN	Requirements increased; no vocational education required	Principles of Technology, Technical Math, Communications Technology, Agricultural Science		Vocational education had to change to survive—flexible scheduling (especially three-hour block), addition of basic courses to vocational education curriculum, and administrative workshops
WI	Requirements increased; no vocational education required	Yes		

Table 4 (cont.)

Subgroup 3	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
AK	Requirements increased; no vocational education required	Local option	New funding formula	
CO	Local option			2+2 programs; advanced placement; postsecondary options bill; aggressive pursuit by community colleges of programs with high schools
CT	Requirements increased; one unit vocational education or art required	No/Yes . . . more recently on local basis	High school enrollment declines and graduation requirements	
IL	Requirements increased; no vocational education required	Local option	Postsecondary entrance requirements preclude electives like vocational education	Regional planning/delivery of vocational education expected to help some
IN	Requirements increased; no vocational education required	Local option	Secondary vocational education decreasing or steady, postsecondary increasing; postsecondary entrance requirements; funding	New accreditation standards being developed; articulation among and between secondary and postsecondary schools; vocational education/academic integration
KY	Requirements increased; no vocational education required	Local option; many involved	Graduation requirements hurt especially in Vocational Technology Centers; difficult to take courses longer than one-hour in length; one-hour classes OK, two- to three-hour classes hurt; postsecondary entrance requirements	Family life requirements; more options to integrate vocational education and academics locally

Table 4 (cont.)

Subgroup 3 (cont.)	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
ME	Requirements increased; no vocational education required	1988, yes—through separate or integrated vocational education	Program instructional requirements did <i>not</i> address vocational education	
MA	Local option must have increased	Local and Board of Regents input pending	Graduation requirements; personnel cuts due to tax-cutting measures	
MI	State recommends, LEAs decide	Local option but few cases	Vocational Education declines with high school enrollment; per pupil dollar incentives available to districts adopting suggested high school requirements; impacts on time available for vocational education	
MN	No change	Possible? but no data	State Board increased requirements programs to be provided by LEAs; vocational education not included—very disappointing	
MO	Requirements increased; no vocational education required	One of four agriculture courses for one general science	High school graduation requirements; decrease in youth population; difficulty scheduling blocks and travel to Vocational Technology Center	

Table 4 (cont.)

Subgroup 3 (cont.)	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
NH	Vocational education one of the options for required elective	Local option; must be approved by state . . . very few LEAs involved	Academic bandwagon; graduation requirements/standards; increase in dropouts; decrease in two-year programs; handicapped/disadvantaged image; noncoordination of local schedules with Vocational Technology Center	Increase in one-year programs; articulation, 2+2, and advanced credit (although inhibited by state process)
NY	Requirements increased; vocational education required in junior high—one unit technology education, 3/4 unit Home Economics	Occupational Math/Science, Business Math, Agriculture, T and I	Traditional programs hurting enrollments and status	Vocational education up dramatically where traditional programs abandoned and restructured to make them responsive to business, society, and family
NC	Requirements increased; no vocational education required	Local option	Postsecondary entrance requirements could affect vocational education	Students are forcing graduation requirements in grades nine and ten so vocational education left until grades eleven through twelve. Vocational education increasing now but may change; accreditation requires three programs in each school, with a ration of one vocational education teacher per 95 students
OH	Requirements increased; no vocational education required	Integrated courses only	Vocational Technology Centers; cap on number of vocational education units State Department of Education can fund	Articulated programs expected to help; outcome study should impact positively on vocational education curriculum and negatively on general curriculum; integrated curriculum

Table 4 (cont.)

Subgroup 3 (cont.)	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
NE	Requirements increased; no vocational education required	Yes—varies by locality	Graduation requirements; Perkins nonmaintenance clause	Vocational education included in core
PA	Requirements increased; no vocational education required	Yes as of 1988-1989	Vocational enrollment decreasing more than high school enrollment	
RI	Vocational education required for career-bound diploma	None		Vocational education steady despite changes
SC	Requirements increased; no vocational education required	Yes	Declines in grades nine and ten . . . students opting for remedial classes which count toward graduation	
SD	State increased but local requirements greater	None	Postsecondary entrance requirements will hurt high school vocational education and help postsecondary vocational education; teacher certification requirements have eliminated some vocational teachers	Working on vocational education alternatives; working on semester courses and Principles of Technology
VT	Requirements increased; no vocational education required	Yes, but . . .	Graduation requirements in eleventh and twelfth grades; scheduling; Vocational Technology Centers; two-year programs; increase in handicapped has given vocational education image as program for handicapped	Developing integrated concept; adults; need to work on mission of vocational education—spurred on by enrollment declines

Table 4 (cont.)

Subgroup 4	Graduation Requirements	Vocational Alternatives	Negative Impacts	Positive Impacts
AK	Requirements increased; no vocational education required	None		Integrated vocational education under development
NV	Requirements increased; no vocational education required	Local option		

- Funding caps on personnel or units of vocational instruction.
- Decline in high school population and/or state's economy.
- Lack of postsecondary coordination, exploratory/orientation thrust, integrated curricula efforts or program innovation.
- Image as program primarily for handicapped and/or disadvantaged.

DISCUSSION

For the moment, let us regroup the states into two new groups. The first group would include those state subgroups where, relative to high school enrollments, vocational enrollments were either doing about the same or better. The second group would include those state subgroups where vocational enrollments were either not keeping up with the pace of growth in high school enrollments or were, in fact, doing worse. This new, first group would then include the first three subgroups from the increasing vocational enrollment group and the first two subgroups of the decreasing vocational enrollment group. The remaining subgroups would fall to the new, second group.

Basically, the two groups split the states in half—twenty-seven in the first group (including the District of Columbia) and twenty-four in the second group. There is nothing scientific about this latter regrouping, but it does serve to make the point that in a majority

of states, vocational education seems to be holding its own in an education reform environment. Moreover, it is apparent that almost all states have experienced the trials of revised state accreditation standards, increased graduation requirements, and other reform related policy activities. Yet, vocational education programs in over half the states have managed to sustain themselves and, in a few cases, to thrive.

On the other hand, going back to our original Groups 1 and 2, it is clear that vocational enrollments are declining in well over half the states. Efforts to reform or restructure vocational offerings appear to have a positive effect on encouraging continued student participation in these programs, yet the pressures on students to meet increased academic, nonvocational requirements for high school graduation and/or entrance into postsecondary education certainly makes it difficult to accommodate these students' vocational interests. Clearly, resistance to restructuring vocational programs or to articulating high school with postsecondary vocational programs cripples the ability of vocational education to serve these students. Whether such resistance stems from a lack of leadership, from a diminished image of vocational education, from the inability of vocational education to address the changing needs or interests of secondary students, or from all of the above, is unclear and warrants further study.

In any event, problems and concerns continue in many states, but there are lessons to be learned from many more states. For those states who have not yet initiated efforts to restructure vocational program delivery, to pursue articulated programs with postsecondary institutions, or to integrate vocational programs with academic curriculum, time is of the essence. Secondary school reform issues have moved well beyond the single issue of high school graduation requirements and into issues of program delivery, parental versus student choice, vocational and educational outcomes, and secondary school program restructuring. Being in the mainstream of these changes is far more advantageous than being in the position of playing "catch up."

One final note has to do with data integrity. For many states, vocational data collection and management efforts appeared to be in critical condition. Most states have less than adequate systems for collecting secondary enrollment data that are consistent and reliable. Systems for vocational enrollment data collection were found to be particularly inconsistent and ill defined, a finding which was interpreted to be more symptomatic than problematic. Vocational education is having a difficult time finding itself in this era of

education reform. Without consistent, reliable enrollment data to allow for accurate accounting of students' participation and interest in new, restructured vocational programs, or even in the old, traditional programs, vocational education is rendered incapable of knowing where it is going. Leadership in developing a standard for reporting and tracking student participation is critical to the long term viability of vocational education. Whether this begins at the school, state, or federal level, the initiative must be taken to examine seriously and critically the impact of new and old paths of vocational program delivery before we completely lose our way.

REFERENCES

Gray, K. C. (1990). Roots of crisis: A study of declining secondary vocational education graduates in central Pennsylvania. *Journal of Industrial Teacher Education*, 28(1), 17-29.

Rossetti, R. (1990). *High school students not enrolling in vocational education and people influencing students' decision*. Columbus: Ohio State University, Department of Agricultural Education.

Strickland, D. C., Frantz, N. R., & Elson, D. E. (1990, December). *Vocational enrollments in the U.S.: Which way did they go?* Paper presented at the American Vocational Association Convention, Cincinnati, OH.

Wirt, J. G., Muraskin, L. D., Goodwin, D. A., & Meyer, R. H. (1989). *Summary of findings and recommendations: Final report. Volume I, National Assessment of Vocational Education*. Washington, DC: U.S. Department of Education.

APPENDIX A
STATE SURVEY INSTRUMENT
(Example only)

NCRVE

National Center for Research in
Vocational Education

University of California, Berkeley

Dear

For the past three years, we have worked with you and all other state directors in establishing a national, longitudinal data base to study vocational enrollment trends. Through this process, you have provided both overall high school and vocational enrollment data as well as information on reform related policies and programmatic strategies implemented in your state. To continue this process, we have enclosed the following materials for your attention: (1) the 1990 survey for your state; (2) a pre-addressed, stamped postcard for indicating data availability for your state; and (3) a copy of the preliminary findings of this research. This survey packet is being sent directly to you and to the person designated by you to respond to prior VEPS surveys.

The Vocational Enrollment Patterns Study (VEPS) survey for this year consists of two parts. Part I asks you to review previously collected data and then report the most recent enrollment data for your state. Please note in Attachment 1 that "Industrial Arts" is still being used to refer to what is known in some states as Technology Education. We have found that many states have not yet made this change in title and it was easier to obtain the correct data by using the old title rather than the new one. Part II requests supplemental information on a variety of reform related policies and/or strategies and a review of the policy journal developed for your state from previous survey responses. Specific instructions for completing the survey document are given on the blue cover page.

The enclosed postcard should be completed and returned as soon as possible. We will use your responses on the postcard to determine the appropriate data status for each state.

The report on our preliminary findings is enclosed to keep you informed on the use of your data as well as the status of our findings. Ultimately, the data you provide in this survey will be incorporated into a final VEPS report and distributed nationally through the NCRVE publications bureau. Results will also be shared with U. S. Department of Education personnel in lieu of their conducting similar survey activities.

We anticipate meeting with you and other state directors at the fall NASDVTEC meeting to allow for your involvement in developing recommendations based on the outcomes of this study. If you would like to discuss the survey procedures or findings with us prior to that time, please feel free to contact us (703/231-9291). We appreciate your continuing cooperation in this effort.

Sincerely,



Deborah C. Strickland



Donald E. Elson



Nevin R. Frantz

NCRVE

National Center for Research in
Vocational Education

University of California, Berkeley

Vocational Enrollment Patterns Study

Name of Respondent: _____

Title: _____

Address: _____

Phone: _____

Instructions

There are two main components to this survey document: Part I includes an Edit Sheet and an enrollment data sheet (Attachment 1); and Part II includes a Supplemental Information Survey form, a High School Graduation Requirements Table (Attachment 2), and a Policy Journal (Attachment 3).

Part I. (buff section)

1. Edit Sheet - Please review the edit sheet first. Items on the edit sheet refer to questions or "problems" we encountered in working with the 1982-83 through 1988-89 data reported for your state on Attachment 1. Respond to items on the edit sheet and make adjustments to Attachment 1 accordingly.
2. Attachment 1 - After making adjustments (as necessary) according to the Edit Sheet, complete Attachment 1 by providing the appropriate high school and vocational enrollment data for your state.

Part II. (green section)

3. Complete the Supplemental Information Survey form, which will also require that you review the Graduation Requirements Table provided in Attachment 2.
4. Attachment 3 - Please review the policy data provided by your state respondent(s) over the last three years. Revise Attachment 3 as needed.

Please return this entire document by July 15, 1990.

PART I

EDIT SHEET

ATTACHMENT 1:

ENROLLMENT DATA SHEET

VIRGINIA (FIPS Code 51)

Edit Sheet

Please review all figures and notes on your enrollment table (Survey Attachment 1). Make any changes/corrections directly on Attachment 1.

Below you will find a list of specific tasks and/or questions to be addressed in completing your data sheet. Please provide as much information as possible regarding the task/question indicated, so that we may appropriately analyze and document your data. Feel free to continue your responses, as needed, onto additional sheets of paper.

1. Please complete the data column for 1989-90.
2. There was a dramatic increase in vocational enrollments in 1988-89. Was this due to changes in reporting requirements or was this due to programmatic changes?

3. Please verify which data (i.e., high school, vocational and service area) are duplicated versus nonduplicated counts.

Please verify the following sources for the data provided on your enrollment survey sheet. These sources were indicated by the respondent to the 1989 version of this survey.

Total high school enrollment data:

Fall Membership in Virginia's Public Schools

Total vocational education enrollment data:

Vocational Secondary Enrollment Report

Vocational service area enrollments:

Vocational Secondary Enrollment Report

**ATTACHMENT 1
ENROLLMENT DATA SHEET**

	VIRGINIA					
	<u>1982-83</u>		<u>1983-84</u>		<u>1984-85</u>	
	<u>1982-83</u>	<u>% Change</u>	<u>1983-84</u>	<u>% Change</u>	<u>1984-85</u>	<u>% Change</u>
High School	293012	-0.4	291906	2.0	302066	-0.4
% Change	.	.	.	.	.	.
Vocational	347062	1.1	350955	-0.9	345380	-0.7
% Change	.	.	.	.	.	.
Agriculture	23078	-5.5	21803	-5.0	20716	-3.0
% Change	.	.	.	.	.	.
Business	106037	9.6	116445	2.6	119762	0.3
% Change	.	.	.	.	.	.
Health	33333	3.4	3449	3.5	3561	-2.6
% Change	.	.	.	.	.	.
Non-Occ Hm Ec	73451	-3.3	71021	-3.3	69303	-2.4
% Change	.	.	.	.	.	.
Occ Hm Ec	4704	-0.4	4686	-0.4	4782	2.0
% Change	.	.	.	.	.	.
Marketing	15050	-5.6	14208	6.1	15068	3.8
% Change	.	.	.	.	.	.
Ind Arts	76750	-0.6	76279	-0.6	72065	-5.5
% Change	.	.	.	.	.	.
T & I	33067	-5.8	31139	-0.9	30849	-0.9
% Change	.	.	.	.	.	.
a Other	8928	-1.1	8826	-1.1	8774	-5.1
b Other	2664	16.3	3099	16.3	3576	15.4
c Other	.	.	.	.	.	.
% Change	.	.	.	.	.	.

a) Disadvantaged

b) Handicapped

c) Gifted (these programs were not offered prior to 1986-87)

NOTE: All data are reported to be nonduplicated counts for grades 9-12.

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I 2 of 2

SUPPLEMENTAL INFORMATION SURVEY

I. Information Update

1. Attachment 2 (at the end of this section) outlines high school graduation requirements for all states. Please verify the information for your state, paying particular attention to:

Col 1 Graduating class for which requirements were first effective
Col 10 Indication of VE courses that are included in the high school graduation requirements
Col 11 Indication of VE courses that are recognized as alternatives to academic courses required for graduation

2. Attachment 3 (at the end of this section) provides the policy journal developed for your state from previous responses to VEPS surveys. Please review your journal and make revisions/updates as necessary.

II. Supplemental Information

1. Have postsecondary entrance requirements changed in your state during the last five years?

Two-year institutions: _____ Yes _____ No

If yes, please indicate the graduating class for which this change first became effective:

Four-year institutions: _____ Yes _____ No

If yes, please indicate the graduating class for which this change first became effective:

2. Have state school accreditation standards been changed during the last 5 years?

_____ Yes _____ No

If yes, what was the effective date of this change? _____

3. Does your state offer secondary vocational education in regionally-based centers?

Yes **No**

If yes, please respond to items 3a-3d below and then continue with items 4 and 5.

If no, go directly to items 4 and 5.

Yes _____ **No** _____

If yes, please provide enrollment data (as available) for the last five years:

<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>
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4. Several factors have been identified through previous VEPS surveys as having positive and/or negative effects on participation in vocational education. Several of these factors are listed below. Please indicate to what extent (if any) each factor has had an impact on students' participation in vocational education in your state.

	<u>Negative</u>	<u>Somewhat Negative</u>	<u>No Effect</u>	<u>Somewhat Positive</u>	<u>Positive</u>	<u>NA</u>
High school graduation requirements	1	2	3	4	5	_____
Postsecondary entrance requirements	1	2	3	4	5	_____
State school accreditation standards	1	2	3	4	5	_____
Regional vocational centers	1	2	3	4	5	_____
Integrated vocational-academic curricula	1	2	3	4	5	_____
Traditional vocational program structures	1	2	3	4	5	_____
Secondary/Postsecondary articulation efforts	1	2	3	4	5	_____
Demographics (e.g., population, economy, unemployment, etc.)	1	2	3	4	5	_____
Funding	1	2	3	4	5	_____
Program restructuring	1	2	3	4	5	_____
Other - Explain below:	1	2	3	4	5	_____

BEST COPY AVAILABLE

5. Considering the above factors, which do you feel has had:

a) the most positive influence on participation in vocational education

b) the most negative influence on participation in vocational education

Comments:

PART II
SUPPLEMENTAL INFORMATION SURVEY FORM

ATTACHMENT 2:
GRADUATION REQUIREMENTS TABLE

ATTACHMENT 3:
POLICY JOURNAL

ATTACHMENT 2 Minimum High School Graduation Requirements 86-89 Surveys

STATE	Grad Class	1 ENG	2 SS	3 MATH	4 SCI	5 PE/HE	6 ELEC	7 OTHER	8 TOTAL	9 VE Req.	10 VE Alt.	11	12	Notes
Alabama	88-89	4.00	3.00	2.00	0.50	9.50			22.00	No	Bus. math Bus. Eng.			
Alaska	84-85	4.00	3.00	2.00	1.00	9.00			21.00	No	Local Option	Grad. req. effective in '84.		
Arizona	86-87	4.00	2.50	2.00		9.00	0.50		20.00	No	No			
Arkansas	86-87	4.00	1.00	5.00		1.00	10.00		16.00	No	1 unit of Prac.Arts science	1 unit of 5 units under math include required units in science		
California		3.00	3.00	2.00	2.00			1.00	13.00	No	No	VE alt. only for some very isolated cases		
Colorado												Local Boards determine the graduation requirements. No change since 1/87.		
Connecticut	87-88	4.00	3.00	3.00	2.00	1.00	7.00	1.00	21.00	1 cre. of VE or Art	Yes	Districts may grant credit in academic subjects for voc. courses.		
Delaware	84-85	4.00	3.00	2.00	2.00	1.50			19.00	No	Local Option	The additional 6.5 credits necessary for graduation are designed by LEA's in accordance with approp course seq & elec available for each student.		
D.C.	83-84								17.5	No	Math/Tech Sc & Tech	With VE Alt. 20.5 units are required.		
Florida	85-86	4.00	3.00	3.00	1.00	9.00	1.00	.5 cre in Yes Prac.Arts	20.5					
Georgia	87-88	4.00	3.00	2.00	2.00	1.00	8.00	1.00	21.00	1 unit of Prin of VE or oth Technolog		VE accepted as alt to math, science and other academic credits.		
Hawaii	86-87	4.00	4.00	2.00	2.00	1.50	6.00	0.50	20.00	No	No			
Idaho	87-88	5.00	2.50	2.00	2.00	1.50	6.00	2.00	21.00	Prac.Arts or Hum	Voc Ag Marketing	15 semester credits required after 1988.		
Illinois	87-88	3.00	2.00	2.00	1.00	4.00	1.00	0.25 (Cons.Ed)	16.00	No	Yes	Any elective req. may be satisfied by coursework of the same length in Voc. Ed.		

ATTACHMENT 2 (Continued) Minimum High School Graduation Requirements 86-89 Surveys

STATE	Grad Class	1	ENG	2	SS	3	MATH	4	SCI	5	PE/H.E.	6	ELEC	7	OTHER	8	TOTAL	9	VE Req.	10	VE Alt.	11	12	Notes
Indiana	88-89	4.00	2.00	2.00						1.50	8.00					19.50	No	Bus. Math Bus. Comm. Bus Eng.						
Iowa																							Local boards determine graduation requirements.	
Kansas	88-89	4.00	3.00	2.00		2.00		1.00	9.00							21.00	No	No						
Kentucky	86-87	4.00	2.00	3.00		2.00	1.00	8.00								20.00	Family Life ed	Bus Math & others						
Louisiana	86-88	4.00	3.00	3.00		3.00	2.00	7.50	0.50	(Compllt)						23.00	No	Bus Eng Bus Math Data Proc						
Maine	87-88	4.00	2.50	2.00		2.00	1.50									1.00	13.00	No	No					Voc students may, with the approval of the commissioner, satisfy 2nd year math, science, SS fine arts req. through sep/integrated study with voc courses
Maryland	86-87	4.00	3.00	3.00		2.00	1.00	5.00	2.00							20.00	1 unit of Local Prac Arts Option							
Massachusetts																								Local boards determine graduation requirements. Policy for acceptance of VE courses for academic credit under discussion.
Michigan	87-88	4.00	3.00	2.00		2.00	1.00	2.50										VE or other	Local Option					
Minnesota	85-86	3.00	2.00													1.00		15.00						
Mississippi																								Grad. req. not increased; req. curriculum offerings increased. No firm data available regarding acceptance of VE for academic credit.
Missouri	88-89	4.00	2.00	2.00		2.00										8.00		18.00	No	No				
Montana	87-88	3.00	2.00	2.00		2.00	1.00	1.00	10.00							2.00		22.00	1 unit of Vc Ag Prac Arts for Sci					
Nebraska	88-89	4.00	2.00	2.00		2.00	1.00	2.00								2.00		20.00	1 unit of Prac.Arts	No	No	Local Option	VE part of core curriculum: 80% of the 20 credits req. must be from core curriculum.	

ATTACHMENT 2 (Continued) Minimum High School Graduation Requirements 86-89 Surveys

STATE	Grad Class	1	ENG	2	SS	3	MATH	4	SCI	5	PE/HE	6	ELEC	7	OTHER	8	TOTAL	9	VE Req.	10	11	12	Notes
Nevada	91-92	4.00		2.00		2.00		2.50		?		1.50		22.00	1 unit of Local Prac.Arts Option								
New Hampshire	85-86	4.00		2.50		2.00		1.25		7.00		1.00		19.75	No	Local Option	Acad credits for voc program are being granted by some schools.						
New Jersey	90-91	4.00		3.00		3.00		2.00		4.00								No	No	No	No	Grad. req. include these units but not limited to these.	
New Mexico	89-90	4.00		3.00		3.00		2.00		1.00		9.00		1.00		23.00	No						A policy statement for dual credit is under development.
New York	88-89	4.00		4.00		2.00		2.00		0.50		2.00		4.00		18.50	Tech Ed Yes	Req. for Regents' diploma. Req. for local diploma.					
North Carolina	86-87	4.00		2.00		2.00		1.00		9.00													Occupationally related Math & Science, business math, selected trade & tech. ag, health & tech. ed. programs are accepted for academic credit.
North Dakota	88-89	4.00		3.00		2.00		2.00		1.00		5.00		5.00		18.50	Tech Ed Hm/career skills						
Ohio	90-91	3.00		2.00		2.00		1.00		1.00		9.00											
Oklahoma	86-87	4.00		2.00		2.00		2.00				10.00											
Oregon	87-88	3.00		2.50		2.00		2.00		2.00		8.00		2.50		22.00	1 unit of Local app. arts or others						
Pennsylvania	88-89	4.00		3.00		3.00		3.00		1.00		5.00		2.00		21.00	No	Bus Math Bus Eng Account'g	A district school board may increase or decrease req. or elective units but total units for grad. must not be less than 22				
Rhode Island	87-88 88-89	4.00 4.00		2.00 2.00		3.00 2.00		2.00 2.00		6.00 6.00		3.00 6.00		18.00 16.00	No	No	VE Alt should equal 120 clock hrs & have direct relationship to the course being substituted.	Req. for college-bound students Req. for career bound students. VE included as elective for career bound students.					

ATTACHMENT 2 (Continued) Minimum High School Graduation Requirements 86-89 Surveys

STATE	Grad Class	1	ENG	2	SS	3	MATH	4	SCI	5	PE/H/E	6	ELEC	7	OTHER	8	TOTAL	9	VE Req.	10	VE Alt.	11	12	Notes
South Carolina	86-87	4.00	3.00		3.00	2.00	1.00	7.00			20.00	No												
South Dakota	89-90	4.00	3.00		2.00	2.00				8.00	(CS or FA)	1.00	20.00	No										
Tennessee	86-87	4.00	1.50		2.00	2.00	1.50						20.00	No										
Texas	87-88	4.00	2.50		3.00	2.00	1.50	7.00		1.00	21.00	No												
Utah																								
Vermont	88-89	4.00	3.00		5.00		1.50				1.00	14.50	No											
Virginia	87-88	4.00	3.00		1.00	2.00	2.00	6.00		1.00	21.00	1 unit in (reg dip) Prac Arts 23.00 or F.Arts (adv dip)	Yes											
Washington	88-89	3.00	2.50		2.00	2.00	2.00	5.50		2.00	19.00	1 yr of occ ed												
West Virginia	86-87	4.00	3.00		2.00	2.00	2.00			1.00	21.00	1 unit of app arts or others												
Wisconsin	88-89	4.00	3.00		2.00	2.00	2.00			0.50	13.50	No												
Wyoming																								

The vocational core was included as part of the new reqmts. (1986 Survey)

VE pgm completers may substitute credit for math & science. Grad. req. increased from 20 to 21 credits for regular diploma; 22 to 23 for advanced diploma.

Local school boards determine graduation reqmts. Local req often exceed state minimum req of 18 units.

ATTACHMENT 3

VIRGINIA (51)
Policy JournalSurvey DateInformation Obtained

March 1986

- * State board of education has increased high school graduation requirements during the past five years. New requirements became effective July 1, 1984.
- * No vocational education was included as part of the new requirements for high school graduation.
- * An alternative to the requirement of a mathematics or science course to complete a 20-credit diploma program is provided for localities and is stated as follows:
...this requirement may be met by completing the sequence of courses needed for occupational preparation in one of the following programs--Agriculture, Business, Distribution, Health Occupations, Occupational Home Ec, and T&I. (From Occupational Preparation Program Options, Effective July 1, 1984, Department of Education, Division of Vocational Program Services, December 1983.)
- * One additional math and one additional science credit are now required of all high school graduates in Virginia. In addition, certain requirements prescribing additional math, science, and foreign language have been put into effect by the State Board for those students who receive the "Governor's Seal" or "Board of Education Seal".
- * Overall enrollment patterns in vocational education are proportional to statewide declining enrollment patterns.

January 1987

- * Changes in graduation requirements effective for students graduating in 1987-88.

* Summary of graduation requirements:	
Lang Arts	4
Social Studies	3
Math	1
Science	2
PE/Health	2
Elect	6
<u>Other</u>	0
Total	20

- * Vocational program completers may substitute program credit for math or science requirement.

VIRGINIA - ATTACHMENT 3 continued

1988 Survey

1. Changes to HS Grad. Reqmts since 3/86-1/87: The State Board has increased the number of credits required for graduation as follows:
 - a. from 20 to 21 for the regular diploma
 - b. from 22 to 23 for the Advanced Studies Program diploma
2. Changes in State Accred. Standards: This increase in requirements has resulted from the addition of 1 credit in either fine or practical arts. It is believed that this may increase enrollments in vocational education to some extent.
3. Changes in Postsec. Entrance Reqmts.: None
4. Implementation of Policies/Strategies w/implications on VE: A secondary school shall accept credits received from other accredited secondary schools, including summer schools, special sessions, schools accredited through the Virginia Council for Private Education and educational programs operated by the state.

July, 1989 Survey

Journal changes

No changes have occurred in the graduation/program requirements information submitted on the 1988 survey.

Virginia's vocational enrollment will show a sizeable increase beginning with 1988-89 school year. This change is due to a data collection policy which does not discriminate between those courses in a sequence which lead to an occupational objective & those that are offered outside of a sequence and do not lead necessarily to an occupational objective. All vocational courses are now being captured in our enrollment figures.

Edit sheets responses

1. The total Vocational Enrollment figures for 1985-86 and 1986-87 do not equal the sum of their respective service area enrollments for the same years. All other total Vocational Enrollment figures match their respective service area sums. Please verify the 1985-86 and 1986-87 figures.

Figures corrected

VIRGINIA - ATTACHMENT 3 continued

2. The data appear to be inconsistently reported. Please clarify which data are duplicated and which are not. If consistent data can be obtained using duplicated data or course counts, please submit that data.

All data are duplicated.

3. Special Needs data for 1982-83 through 1985-86 need to be reported.

Data reported.

Matrix changes

None

APPENDIX B
STATE BY STATE ENROLLMENT DATA TABLES

ATTACHMENT 1¹ SHEET
ENROLLMENT DATA SHEET
ALABAMA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	209763 -1.4	206919 1.9	210846 -1.0	208676 0.8	210376 -1.0	208230 -1.0	203299 -2.4	198013 -2.6
Vocational % Change	165861 -1.1	164079 6.0	173962 5.7	183948 4.2	191590 5.3	201770 -4.9	191800 -4.9	191789 -0.0
Agriculture % Change	323378 -1.6	318464 4.0	33127 -1.0	32802 -0.9	32502 4.7	34024 4.7	35012 -3.0	353337 1.0
Business % Change	21690 3.1	22360 7.4	24014 8.8	26137 6.2	27753 3.9	28828 5.9	30530 -0.3	30424 -0.3
Health % Change	34118 2.7	3509 -1.1	3470 10.4	3831 0.3	3842 0.1	3847 2.4	3940 2.4	4089 3.8
Non-Occ Hm Ec % Change	56618 -2.1	55415 12.2	62170 8.7	67596 4.2	70414 9.2	76922 -8.9	70064 -8.9	70507 0.6
Occ Home Ec % Change	4443 -7.9	4092 -0.1	4086 9.3	4466 0.1	4470 0.1	4290 -4.0	3976 -7.3	3915 -1.5
Marketing % Change	6389 1.4	6477 4.8	6786 6.6	7231 6.1	7669 2.1	7832 -8.6	7158 -8.6	7353 2.7
Ind Arts % Change	9631 4.8	10093 0.1	10103 -21.9	7891 13.6	8965 13.6	9394 4.8	8684 -7.6	10071 16.0
T & I % Change	30752 -3.3	29732 0.5	29867 3.5	30925 0.3	31018 0.5	31158 0.5	29755 -4.5	27464 -7.7
a Other % Change	199 .	332 66.8	339 2.1	397 17.1	740 86.4	898 21.4	895 -0.3	1030 15.1
b Other % Change	.	.	.	2672 .	4217 57.8	4577 8.5	3786 -17.3	3599 -4.9
c Other % Change	343 .	223 -35.0	.	.	.	.	.	.

- a) Technical Education
- b) Prevocational programs
- c) Remedial Programs

NOTE: Data for high school enrollment, Business, Health, Occupational Home Economics, Marketing, T&I and Technical are for grades 9-12; data for Agriculture, Consumer Home Ec., Industrial Arts and Prevocational are for grades 7-12.

ATTACHMENT 1 SHEET
ENROLLMENT DATA SHEET
ALASKA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	^a <u>1986-87</u>	^a <u>1987-88</u>	^a <u>1988-89</u>	<u>1989-90</u>
High School % Change	29977	28983	27348	27582
Vocational % Change	18103	23487	-5.6	0.9
Agriculture % Change	29.7	22166	-5.6	21712
Business % Change	275	273	-0.7	-2.0
Health % Change	6253	7715	-7302	6918
Non-Occ Hm Ec % Change	23.4	-5.4	-5.4	-5.3
Occ Home Ec % Change	91	-86	-72
Marketing % Change	-5.5	-16.3
Ird Arts % Change	3078	3339	3286	3915
T & I % Change	354	1036	-8.5	19.1
b Other % Change	192.7	-17.1	-17.5	-70.9
c Other % Change	2051	717	-65.0	941
Other % Change	4770	7341	-6.3	10.4
					1322	2975	-25.0	6666
					.	.	.	-3.0
					.	.	.	1898
					.	.	.	-14.4
					.	.	.	514
					.	.	.	-23.5
				

- a) A complete report of Anchorage data was not available in this year.
- b) Coop, OJT and Related
- c) Includes CIP codes 03, 09, 10, 12, 15, 17 and Applied Communications and Applied Math.

NOTE: All data are for grades 9-12. High school Enrollments are nonduplicated; Vocational Enrollments are duplicated.

ATTACHMENT 1 SHEET
ENROLLMENT DATA SHEET

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	163552	164766	170651	177886	180821	181176	181454	177963
% Change	.	0.7	3.6	4.2	1.6	0.2	0.2	-1.9
Vocational	.	130369	126650	129670	126664	125453	125660	120489
% Change	.	.	-2.9	2.4	-2.3	-1.0	0.2	-4.1
Agriculture	.	4099	4059	4388	4397	3706	4244	3980
% Change	.	.	-1.0	8.1	0.2	-15.7	14.5	-6.2
Business	.	54099	51685	53050	49879	48823	46027	44485
% Change	.	.	-4.5	2.6	-6.0	-2.1	-5.7	-3.4
Health	.	1403	1457	1365	1276	1242	1199	1212
% Change	.	.	3.8	-6.3	-6.5	-2.7	-3.5	1.1
Non-Occ Hm Ec	.	21979	21098	21078	2090	21480	21038	19294
% Change	.	.	-4.0	-0.1	-1.4	3.3	-2.1	-8.3
Occ Home Ec	.	2611	2078	2407	3245	3061	2816	2858
% Change	.	.	-20.4	15.8	34.8	-5.7	-8.0	1.5
Marketing	.	3373	3816	3911	4513	5799	6259	5794
% Change	.	.	13.1	2.5	15.4	28.5	7.9	-7.4
Ind Arts	.	34700	30899	33010	29466	27224	23729	20708
% Change	.	.	-11.0	6.8	-10.7	-7.6	-12.8	-12.7
T & I	.	5120	6262	5192	9618	10292	a 11810	a 11913
% Change	.	.	22.3	-17.1	85.2	7.0	14.7	0.9
b Other	.	1688	3486	3508	2466	3148	6668	7099
% Change	.	.	106.5	0.6	-29.7	27.7	111.8	6.5
c Other	.	1297	1807	1758	1011	675	1868	3144
% Change	.	.	39.3	-2.7	-42.5	-33.2	176.7	68.3
Other
% Change

a) Includes "New" Technology enrollments.

b) Non-mainstreamed (Special Needs) enrollments

c) Diversified Co-op, Exploration, and Vocational Guidance

NOTE: All enrollment data are duplicated. All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
ARKANSAS

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>a 1989-90</u>
High School	131947	130953	131714	133993	134901	133772	131183	122798
% Change	.	-0.8	0.6	1.7	0.7	-0.8	-1.9	-6.4
Vocational	73587	85575	91449	99365	104283	104338	102699	101565
% Change	.	16.3	6.9	8.7	4.9	0.1	-1.6	-1.1
Agriculture	13047	17501	17750	17769	17211	16648	15359	15792
% Change	.	34.1	1.3	0.2	-3.1	-3.3	-7.9	3.0
Business	15065	20318	24097	31371	35524	39040	41285	39804
% Change	.	34.9	18.6	30.2	13.2	9.9	5.8	-3.6
Health	714	706	725	634	585	611	537	436
% Change	.	-1.1	2.7	-12.6	-7.7	4.4	-12.1	-18.8
Non-Occ Hm Ec	28632	32367	33523	35233	35943	33183	30191	30984
% Change	.	13.0	3.6	5.1	2.0	-7.7	-9.0	2.6
Occ Home Ec	1487	1652	1620	1587	2559	2489	2232	2171
% Change	.	11.1	-1.9	-2.0	61.2	-2.7	-10.3	-2.7
Marketing	2078	1990	1903	1820	2527	2581	2655	3276
% Change	.	-4.2	-4.4	-4.4	38.8	2.1	2.9	25.4
Ind Arts	.	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.	.
T & I	11922	8159	7863	8034	8998	9419	8295	8186
% Change	.	-31.6	-3.6	2.2	12.0	4.7	-11.9	-1.3
b Other	.	.	.	.	122	82	106	115
% Change	.	.	.	.	.	-32.8	29.3	8.5
c Other	642	2882	3988	2917	814	285	-140	34
% Change	.	348.9	38.4	-26.9	-72.1	-65.0	-50.9	-75.7
d Other	.	.	.	.	.	.	904	767
% Change	.	.	.	.	.	.	-15.2	.

a) This is beginning of the year enrollment; it should be higher when year-end figures are available

- b) Technical Enrollment
- c) Career Orientation
- d) New program for special needs students (exploratory)

NOTE: All data are nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
CALIFORNIA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	1263668 . .	1275493 . .	1305148 . .	1328849 . .	1332305 0.3	1318394 -1.0	1306077 -0.9	. .
a Vocational % Change	992210 . .	935936 . .	953255 . .	1266603 . .	1349141 6.5	1273008 -5.6	. .	. .
Agriculture % Change	57149 . .	50449 . .	48403 . .	535503 . .	56926 6.4	55104 -3.2	. .	. .
b Business % Change	284501 . .	296887 . .	334022 . .	441661 . .	458330 3.8	446367 -2.6	. .	. .
c Health % Change	. .	19911 . .	15202 . .	19015 . .	29232 53.7	28413 -2.8	. .	. .
Non-Occ Hm Ec % Change	167527 . .	144076 . .	143873 . .	252154 . .	223209 -11.5	207383 -7.1	. .	. .
d Occ Home Ec % Change	40320 . .	35020 . .	29009 . .	. .	30360 . .	32871 8.3	. .	. .
Marketing % Change	24659 . .	16887 . .	16336 . .	20370 . .	38786 90.4	42261 9.0	. .	. .
Ird Arts % Change	303809 . .	263870 . .	241422 . .	349554 . .	328791 -5.9	273622 -16.8	. .	. .
e T & I % Change	114245 . .	108836 . .	124988 . .	130346 . .	183513 40.8	186987 1.9	. .	. .
f Other % Change	. .	. .	. .	. .	5737 . .	5991 4.4	4272 -28.7	. .
g Other % Change	. .	. .	. .	. .	51277 . .	50108 -2.3	45946 -8.3	. .
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

a) "Other" Enrollments not included.

b) Office Education Enrollment only

c) Health Enrollment may have been combined with T&I for 1982-83.

d) Occupational Home Economics Enrollments for 1985-86 were combined with Non-occupational Home Economics Enrollments.

e) Includes T & I and Technical Education Enrollment for 1982-83 and 1984-85.

f) Technical Education

g) Work Experience Education (not collected prior to 1985-86).

NOTE:

Major changes were made in data reporting system effective school year 1985-86 and again in 1986-87. High School Enrollments are nonduplicated; Vocational Enrollments are duplicated. All data are for grades 9-12 (vocational includes some Adult secondary). Consistent data available only for 1986-87 and beyond.

**ATTACHMENT 1¹
ENROLLMENT DATA SHEET**

		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>a 1985-86</u>	<u>b 1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School		166675	161743	157057	153168	147890	138803	130933	-5.7
% Change		-3.0	-2.9	-2.5	-3.4	-6.1	-5.7		
Vocational		119246	119417	110797	136293	121268	115560	-4.7	
% Change		0.1	-7.2			-11.0			
Agriculture		1681	1617	1556		1688	1358	1291	
% Change			-3.8	-3.8			-19.5	-4.9	
Business		37735	39642	35700		34179	30991		
% Change			5.1	-9.9		-13.4		-9.3	
Health		1300	1123	1021		1076	777	778	
% Change			-13.6	-9.1			-27.8	0.1	
Non-Occ Hs Ec		30228	26294	26416		30944	26588	25969	
% Change			-13.0	0.5		-14.1		-2.3	
Occ Home Ec		1995	2139	1875		2911	2144	2268	
% Change			7.2	-12.3			-26.3	5.8	
Marketing		3264	3121	3182		3863	3093	2902	
% Change			-4.4	2.0			-19.9	-6.2	
Ind Arts		25607	27683	23374		34043	30536	30404	
% Change			8.1	-15.6			-10.3	-0.4	
c T & I		11040	11532	11382		13859	9034	9201	
% Change			4.5	-1.3			-34.8	1.8	
d Other		3151	2922	2748		3214	2693	2629	
% Change			-7.3	-6.0			-16.2	-2.4	
e Other		3245	3344	3543		5231	11867	9127	
% Change			3.1	6.0			-23.1		
Other									
% Change									

a) No Vocational data were collected in 1985-86.

b) Prior to 1986-87, Enrollment data were collected only for state-approved programs. Starting in 1986-87 Enrollment data were collected for all programs.

c) Includes T & I and Occupational Preparation programs (CIP areas 12, 15, 41, 43, 46-49).

d) Cooperative Work Experience/Diversified Occupations

e) Multi-occupational and career orientation

NOTE: High School Enrollments are nonduplicated; Vocational are duplicated. All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		COLORADO							
		1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
High School % Change	162702	162554 -0.1	166096 2.2	168557 1.5	169142 0.3	164865 -2.5	157167 -4.7	153098 -2.6	
Vocational % Change	44916	42468 -5.5	38592 -9.1	41664 8.0	44297 6.3	44912 1.4	43272 -3.7	39649 -8.4	
Agriculture % Change	2666	2468 -7.4	2311 -6.4	2243 -2.9	2350 4.8	2235 -4.9	2104 -5.9	2058 -2.2	
Business % Change	15548	15306 -1.6	12768 -16.6	12481 -2.2	13639 7.7	13906 3.5	12900 -7.2	11584 -10.2	
Health % Change	550	507 -7.8	475 -6.3	496 4.0	541 9.5	503 -7.0	473 -6.0	418 -11.6	
Non-Occ Hm Ec % Change	7000	7241 3.4	6186 -14.6	8629 39.5	8986 4.1	9187 2.2	9129 -0.6	8609 -5.7	
Occ Home Ec % Change	1998	1887 -5.6	1738 -7.9	1857 6.8	2360 27.1	1927 -18.3	1968 2.1	1571 -20.2	
Marketing % Change	4227	3946 -6.6	3959 0.3	4324 9.2	4750 9.9	5091 7.2	4701 -7.7	4644 -1.2	
Ind Arts % Change	•	•	•	•	•	•	•	•	•
T & I % Change	8555	7746 -9.5	7250 -6.4	7339 1.2	7356 0.2	7006 -4.8	6770 -3.4	5575 -17.7	
a Other % Change	3022	2533 -16.2	2868 13.2	3348 16.7	3541 5.8	3854 8.8	4012 4.1	4293 7.0	
b Other % Change	1350	834 -38.2	1037 24.3	949 -8.5	1064 12.1	1203 13.1	1215 1.0	951 -21.7	
Other % Change	•	•	•	•	•	•	•	•	•

NOTE: All data are nonduplicated counts for grades 9-12.

- a) Special Programs
- b) Technical Education

ATTACHMENT DATA¹ SHEET
ENROLLMENT DATA SHEET
DELAWARE

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	31515 .	30225 -4.1	29806 -1.4	29819 0.0	26524 -11.1	26052 -1.8	27792 6.7	24603 -11.5
a Vocational % Change	40204 .	44401 10.4	41330 -6.9	42895 3.8	43377 1.1	40842 -5.8	41971 2.8	d 40513 -3.5
Agriculture % Change	3532 .	3279 -7.2	3129 -4.6	3296 5.3	2903 -11.9	2896 -0.2	3061 5.7	2771 -9.5
Business % Change	14854 .	16361 10.1	15645 -4.4	16645 6.4	16360 -1.7	14839 -9.3	15363 3.5	14127 -8.0
Health % Change	5090 .	6305 23.9	6015 -4.6	6364 5.8	6156 -3.3	6185 0.5	4886 -21.0	5490 12.4
Non-Occ Hm Ec % Change	10788 .	12327 14.3	11451 -7.1	11455 0.0	12624 10.2	12285 -2.7	14487 17.9	15352 6.0
Occ Home Ec % Change	. .	. .	. .	. .	. .	. .	. .	. .
Marketing % Change	1613 .	1757 8.9	1320 -24.9	1520 15.2	1314 -13.6	1296 -1.4	1023 -21.1	692 -32.4
Ind Arts % Change	247 .	229 -7.3	248 8.3	218 -12.1	13739 6202.3	14457 5.2	15697 8.6	15741 0.3
T & I % Change	4327 .	4372 1.0	3770 -13.8	3615 -4.1	4020 11.2	3341 -16.9	3151 -5.7	2081 -34.0
b Other % Change	. .	. .	. .	. .	110562 .	55371 -49.9	6852 -87.6	6615 -3.5
c Other % Change	. .	. .	. .	. .	. .	. .	. .	156 .
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

a) Vocational Enrollment Totals are the sum of duplicated service area Enrollments with the exception of Industrial Arts and "Other" Enrollment.

- b) Special Education and Exploratory Programs
- c) ?
- d) Preliminary

NOTE: Vocational Enrollments are duplicated counts for grades 7-12. High School Enrollments are nonduplicated counts for grades 9-12.

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ATTACHMENT 1
ENROLLMENT DATA SHEET

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
	D.C.							
High School	.	16616	16195	16409	16328	16672	17396	12395
% Change	.	-2.5	1.3	-0.5	2.1	4.3	-28.7	
Vocational	.	3207	3750	3265	3572	4292	2657	2621
% Change	.	16.9	-12.9	9.4	20.2	-38.1	-1.4	
Agriculture	.	.	75	65	24	28	43	.
% Change	.	.	-	-13.3	-63.1	16.7	53.6	.
Business	.	.	9569	9695	9454	11304	9947	7327
% Change	.	.	.	1.3	-2.5	19.6	-12.0	-26.3
a Health	.	.	541	302	302	288	282	303
% Change	.	.	-	-44.2	0.0	-4.6	-2.1	7.4
a Non-Occ Hm Ec	.	.	7227	7323	8462	10894	9586	3464
% Change	.	.	.	1.3	15.6	28.7	-12.0	-63.9
Occ Home Ec
% Change
Marketing	.	.	2338	2370	2577	3659	3219	1256
% Change	.	.	.	1.4	8.7	42.0	-12.0	-61.0
Ind Arts	.	.	4531	4591	4566	3366	2962	2100
% Change	.	.	.	1.3	-0.5	-26.3	-12.0	-29.1
T & I	.	.	4729	4792	3500	3910	3449	3075
% Change	.	.	.	1.3	-27.0	11.7	-11.8	-10.8
Other
% Change
Other
% Change
Other
% Change

a) High School, junior high and career center enrollments combined. Non-Occupational Home Economics data include Occupational Home Economics enrollments.

7/3

7/4

NOTE: High School and Vocational data are nonduplicated counts for grades 9-12. Vocational service area data are duplicated counts for grades 9-12.

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ATTACHMENT 1
ENROLLMENT DATA SHEET
FLORIDA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	701232	716795	728179	735869	742868	748711	744246	-0.6
a Vocational % Change	477041	432766	548249	389957	751162	840115	851383	1.3
Agriculture % Change	24057	7048	11183	25018	25855	24643	24545	-0.4
Business % Change	126156	51537	64386	161825	155549	180395	186925	3.6
b Health % Change	6121	2707	2783	6717	7102	11722	13047	11.3
c Non-Occ. Hm Ec % Change	85706	75056	112421	154040	126299	160470	160821	0.2
Occ. Home Ec % Change	.	.	.	.	12790	12212	13791	-4.5
Marketing % Change	21534	18701	24516	461	19256	19443	22474	15.6
d Ind Arts % Change	92869	20508	104936	41896	81295	92212	93333	1.2
e T & I % Change	666	454	539	.	26340	27771	28017	0.9
f Other % Change	57899	25022	23733	.	20716	26908	31286	16.3
g Other % Change	62033	231733	203752	.	269709	277741	269820	-2.9
	.	.	.	.	6451	6598	7424	12.5
						2.3		

a) Consistent data available only for 1986-87 and beyond.

b) Includes Public Service Enrollments.

c) Includes Occupational Home Economics Enrollments through 1985-86 only.

d) Includes T&I Enrollments through 1985-86 only.

e) Diversified Occupations

Exploratory

f) Exceptional and Special Needs

g) High school enrollments are nonduplicated counts for grades 7-12. All Vocational Enrollments are duplicated head counts for grades 7-12.

NOTE: High school enrollments are nonduplicated counts for grades 7-12. All Vocational Enrollments are duplicated head counts for grades 7-12.

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ATTACHMENT 1
ENROLLMENT DATA SHEET
GEORGIA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	317446 . -0.6	315546 1.2	319257 2.0	325548 -1.2	321743 -0.8	319301 -0.8	297273 . -6.9	298109 0.3
Vocational % Change	378712 . -5.3	358502 1.3	363062 -22.8	280293 -2.2	274210 25.6	339000 25.6	329676 -2.8	380440 15.4
Agriculture % Change	40880 . -5.9	38483 1.4	39014 -41.8	22710 8.3	24600 31.9	32440 31.9	35345 9.0	35490 0.4
Business % Change	125422 . -2.9	121780 23.2	150154 -16.5	125318 2.3	128215 8.9	139593 -8.0	128371 -8.0	140785 9.7
Health % Change	10820 . -3.0	10492 14.7	12036 -13.2	10444 11.3	11622 -0.2	11597 -0.2	10950 -5.6	10127 -7.5
Non-Occ Hm Ec % Change	120142 . -4.6	114637 3.7	118919 -42.9	67893 -8.8	61926 55.5	96299 -2.9	93509 13.8	106373 13.8
a Occ Home Ec % Change	5237 . .	. .	. .	5940 .	7377 24.2	7841 6.3	6759 -13.8	6078 -10.1
Marketing % Change	9264 . -5.8	8723 26.2	11010 -26.2	8122 8.3	8795 -2.8	8545 -2.8	8548 0.0	8142 -4.7
Ind Arts % Change	76548 . -24.9	57508 22.2	70263 -48.9	35871 2.0	36583 2.0	64625 76.7	63916 -1.1	59806 -6.4
T & I % Change	58244 . -4.6	55536 23.9	68814 -14.8	58606 4.2	61076 4.2	60235 -1.4	58422 -3.0	55946 -4.2
Other % Change	4551 . -10.0	4094 27.8	5232 -7.4	4847 -21.1	3822 -13.6	3303 -41.0	1949 1812	1812 -7.0
b Other % Change	11524 . -9.3	10447 27.6	13334 57.8	21035 -14.3	18022 0.9	18188 -32.9	12197 12615	12615 3.4
c Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

a) Occupational Enrollments are included in Non-occupational Home Economics data for 1983-84 and 1984-85.

- b) Handicapped (RVI program)
- c) Disadvantaged (CYAE Program)

NOTE: Total High School Enrollments are nonduplicated for grades 9-12. Vocational totals are nonduplicated for ALL grades (not just 9-12) for all years except 1985-86 and 1986-87, which includes only grades 9-12. Figures for all program service areas are nonduplicated within each area, but duplicated between areas--thus, if program area figures are added together, the resultant figure would be larger than the total figure reported.

ATTACHMENT 1
ENROLLMENT DATA SHEET
HAWAII

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	a 46421 -0.3	46260 1.4	46919 -1.5	46194 -1.5	45482 -1.5	45302 -0.4	44816 -1.1	.
Vocational % Change	31919 .	34999 9.6	35326 0.9	36447 3.2	36237 -0.6	33428 -7.8	33294 -0.4	.
Agriculture % Change	2493 -2.7	2625 -1.7	2383 7.6	2565 1.8	2611 -8.3	2393 3.0	2465 .	.
b Business % Change	10582 .	14371 35.8	14770 2.8	14594 -1.2	13297 -8.9	12494 -6.0	11531 -7.7	.
Health % Change	.	.	.	.	.	.	.	.
Non-Occ Hm Ec % Change	9625 -9.0	8754 4.3	9130 8.3	9887 3.2	10203 1.0	10310 -2.5	10055 .	.
Occ Home Ec % Change	2405 17.5	2827 -14.5	2418 -0.7	2401 8.6	2607 -19.2	2107 7.2	2259 .	.
Marketing % Change	1606 4.5	1679 -4.3	1606 2.9	1652 12.7	1861 -11.8	1641 10.6	1815 .	.
c Ind Arts % Change	581 -10.2	522 19.7	625 -2.1	612 1.3	620 0.2	621 0.2	629 1.3	.
T & I % Change	4627 -4.5	4421 -0.6	4394 7.8	4736 6.4	5038 -23.3	3862 17.6	4540 .	.
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.

a) Estimated by VEPS staff

b) Office Education Enrollment only

c) Does not include 8th graders although Industrial Arts is a required program for them.

NOTE: High School Enrollments are nonduplicated; Vocational Enrollments are duplicated. All data are for grades 9-12.

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ATTACHMENT 1
ENROLLMENT DATA SHEET
IDaho

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	57527 .0	58115 1.0	59231 1.9	59401 0.3	59075 -0.5	58305 -1.3	58359 0.1	58823 0.8
a Vocational % Change	32514 .0	31817 -2.1	33720 6.0	32025 -5.0	34070 6.4	33321 -2.2	34321 3.0	36323 5.8
Agriculture % Change	5297 .0	4739 -10.5	4364 -7.9	4114 -5.7	4211 2.4	4663 10.7	4880 4.7	5296 8.5
Business % Change	8131 .0	8896 9.4	9350 5.1	9463 1.2	10015 5.8	10557 5.4	9331 -11.6	10737 15.1
Health % Change	126 .0	193 53.2	204 5.7	165 -19.1	149 -9.7	145 -2.7	213 46.9	186 -12.7
Non-Occ Hm Ec % Change	13704 .0	13286 -3.1	13772 3.7	12682 -7.9	13731 8.3	12106 -11.8	13131 8.5	13465 2.5
Occ Home Ec % Change	99 .0	100 56.0	156 19.9	187 32.1	247 11.3	275 -7.3	255 -7.3	351 37.6
Marketing % Change	816 .0	849 4.0	926 9.1	1050 13.4	1126 7.2	1038 -7.8	878 -15.4	1359 54.8
b Ind Arts % Change	607 .0	654 7.7	1238 89.3	580 -53.2	587 1.2	361 -38.5	1180 226.9	933 -20.9
T & I % Change	34448 .0	2856 -17.2	3460 21.4	3582 3.3	3802 6.1	3910 2.8	4260 9.0	3894 -8.6
c Other % Change	286 .0	249 -14.7	242 -0.6	202 -16.5	202 0.0	266 31.7	193 -27.4	102 -47.2
d Other % Change	.0	.0	.0	.0	438 .0	430 -1.8	608 41.4	653 7.4
e Other % Change	.0	.0	.0	.0	.0	.0	.0	315 .0

- a) Vocational totals do not include Special Needs and Teen Parenting enrollments.
- b) Enrollments for Industrial Arts are for programs that receive grants from the state and for classes that meet the guidelines for industrial technology. Since the grants only go to a school once every few years, enrollments jump around according to size of schools getting the grants.
- c) Multi-occupations
- d) Special Needs--these enrollments are mainstreamed, hence these separate figures are not added to the vocational total.
- e) Teen Parenting--these enrollments are not included in vocational total.

NOTE: All data are nonduplicated head counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
ILLINOIS

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	588912	577520	575142	574782	570852	555440	532098	
% Change	.	-1.9	-0.4	-0.1	-0.8	-2.6	-4.2	
Vocational	463339	449232	432564	427150	403051	385477		
% Change	.	-3.0	-3.7	-1.3	-5.6	-4.4		
Agriculture	19682	17619	15841	15385	14809	13319		
% Change	.	-10.5	-10.1	-2.9	-3.7	-10.1		
Business	157847	166277	167654	167617	152679	145538		
% Change	.	5.3	0.8	-0.0	-8.9	-4.7		
Health	5613	4947	4470	4570	3594	3510		
% Change	.	-11.	-9.6	2.2	-13.7	-11.0		
a Non-Occ Hm Ec	45309	43239	43248	43785	41635	39585		
% Change	.	-4.6	0.0	1.2	-4.9	-4.9		
Occ Home Ec	45700	43567	43141	39378	42486	41618		
% Change	.	-4.7	-1.0	-8.7	7.9	-2.0		
Marketing	29961	28742	26644	29004	27280	28376		
% Change	.	-4.1	-7.3	8.9	-5.9	4.0		
Ind Arts	.	.	.	.	.	.
% Change	.	.	.	.	.	.
T & I	146914	136076	123819	119262	112485	106929		
% Change	.	-7.4	-9.0	-3.7	-5.7	-6.9		
b Other	12313	8765	7747	8149	7731	6612		
% Change	.	-28.8	-11.6	5.2	-5.1	-14.5		
Other	.	.	.	.	.	.
% Change	.	.	.	.	.	.
Other	.	.	.	.	.	.
% Change	.	.	.	.	.	.

e) Students reported in Non-occupational Home Economics may also be reported in another program if concurrently enrolled.

b) Special Programs

NOTE: All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
INDIANA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	304819 -2.3	297758 -3.6	287118 -3.6	298386 3.9	297911 -0.2	296536 -0.5	284698 -4.0	
a Vocational % Change	100579 -8.8	91704 0.6	92214 2.6	94650 3.5	97979 3.5	95668 -2.4	89841 -6.1	
Agriculture % Change	16850 -9.3	15286 -11.8	13476 -11.8	13510 0.3	15010 11.1	13341 -11.1		
Business % Change	6033 1.3	6110 11.5	6812 -12.6	5956 5.7	6295 0.1	6302 0.1		
Health % Change	2365 -5.5	2234 -6.2	2096 1.4	2126 -8.4	1948 -8.4	1646 -15.5		
Non-Occ Hm Ec % Change	48083 -13.3	41666 3.8	43252 10.7	47896 0.6	48178 -3.7	46409 -3.7	44611 -3.9	
Occ Home Ec % Change	2288 64.6	3767 10.4	4160 1.4	4219 8.4	4573 2.6	4692 2.6	2565 -45.3	
Marketing % Change	6317 -10.3	5668 7.3	6084 9.3	6648 6.7	7091 6.7	7963 12.3		
Ind Arts % Change	88528 -6.2	83054 -1.2	84043 -0.9	83316 -0.9		73201 .		
T & I % Change	18643 -9.0	16973 -3.8	16334 -12.5	14295 4.1	14884 2.9	15315 2.9		
b Other % Change	2423 -60.3	962 -73.5	255 -25.9	189 -65.1	66 -65.1	218 230.3		
c Other % Change	.	.	.	.	182 .	-57.7 -		
Other % Change	.	.	.	.	.	-57.7 -		

a) Vocational totals do not include Industrial Arts or "Other" Enrollments.

b) Not Elsewhere Classified.

c) ?

NOTE: All Vocational data are nonduplicated head counts.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		<u>IOWA</u>	<u>1988-89</u>	<u>1987-88</u>	<u>1986-87</u>	<u>1985-86</u>	<u>1984-85</u>	<u>1983-84</u>	<u>1982-83</u>
High School	159899	155675	153832	152134	148292	142417	135913	.	.
% Change	.	-2.6	-1.2	-1.1	-2.5	-4.0	-4.6	.	.
a Vocational	59587	60070	57534	58495	63990	62123	60400	.	.
% Change	.	0.8	-4.2	1.7	9.4	-2.9	-2.8	.	.
Agriculture	13628	12597	11782	10836	11131	11046	11796	.	.
% Change	.	-7.6	-6.5	-8.0	2.7	-0.8	6.8	.	.
b Business	1644	5700	5037	6471	7724	9269	9442	.	.
% Change	.	246.7	-11.6	28.5	19.4	20.0	1.9	.	.
Health	525	429	482	313	180	333	388	.	.
% Change	.	-18.3	12.4	-35.1	-42.5	85.0	16.5	.	.
Non-Occ Hm Ec	37549	35574	34459	35094	40078	36414	33605	.	.
% Change	.	-5.3	-3.1	1.6	14.2	-9.1	-7.7	.	.
Occ Home Ec	769	984	1129	900	955	921	1005	.	.
% Change	.	28.0	14.7	-20.3	6.1	-3.6	9.1	.	.
Marketing	1666	1657	1705	2161	1797	1972	2085	.	.
% Change	.	-0.5	2.9	26.7	-16.8	9.7	5.7	.	.
Ind Arts	.	.	.	7489	14772	18903	18782	.	.
% Change	.	.	.	.	97.2	28.0	-0.6	.	.
T & I	3806	3129	2940	2720	2125	2168	2079	.	.
% Change	.	-17.8	-6.0	-7.5	-21.9	2.0	-4.1	.	.
c Other	2345	4536	4067	6590	3910	10487	1432	.	.
% Change	.	93.4	-10.3	62.0	-40.7	168.2	-86.3	.	.
Other	.	.	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.	.	.

a) Vocational total does not include Industrial Arts or Not Elsewhere Classified enrollments.

b) Increase in Business Enrollments reflects greatly expanded enrollment at the 9th and 10th grade levels.

c) Not Elsewhere Classified.

NOTE: Vocational Enrollments are duplicated counts for grades 7-12. High School Enrollments are nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	120916	120298	120676	121978	121667	119857	116960	115385	
% Change	.	-0.5	0.3	1.1	-0.3	-1.5	-2.4	-1.3	
a Vocational	105589	104500	101200	109349	109310	116097	114440	112380	
% Change	.	-1.0	-3.2	8.1	-0.0	6.2	-1.4	-1.8	
Agriculture	7929	7552	7201	6800	5656	5760	6551	5990	
% Change	.	-4.8	-4.6	-5.6	-16.8	1.8	13.7	-8.6	
Business	24550	22960	21015	22731	27366	29390	22774	24611	
% Change	.	-6.5	-8.5	8.2	20.4	7.4	-22.5	8.1	
b Health	3050	3100	3150	3165	3082	2912	3610	631	
% Change	.	1.6	1.6	0.5	-2.6	-5.5	24.0	-82.5	
c Non-Occ Hm Ec	30764	29391	27905	23503	24795	27943	31732	28649	
% Change	.	-4.5	-5.1	-15.8	5.5	12.7	13.6	-9.7	
Occ Home Ec	.	.	.	.	.	.	.	3826	
% Change	.	.	.	.	.	.	.	.
Marketing	2536	2140	2537	3107	3196	3586	3526	3960	
% Change	.	-15.6	18.6	22.5	2.9	12.2	-1.7	12.3	
Ind Arts	.	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.	.
d T & I	30757	31356	29391	24645	28566	29435	29568	28952	
% Change	.	1.9	-6.3	-16.1	15.9	3.0	0.5	-2.4	
e Other	3	-66.7	0.0	1	3	-6.7	31	31	
% Change	.	.	.	.	.	.	.	0.0	
f Other	6000	8000	10000	13318	17373	16941	16764	17189	
% Change	.	33.3	25.0	33.2	30.4	-2%	-1.0	2.5	
Other	.	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.	.

e) Vocational Enrollment does not include Computer Applications.

b) First year believed to be accurate is FY90 (General Health classes removed).

c) Includes Occupational Home Economics (15% 20% of enrollments estimated to be in occupational programs).

d) Includes Industrial Arts Enrollment estimated at 15,000 to 20,000 head count per year for FY 83-85.

e) Technical/Microcomputer Applications.

f) Computer Applications; figures for 1982-83 through 1984-85 are estimated.

NOTE: High school Enrollment data are nonduplicated counts for grades 9-12; vocational data are duplicated for grades 9-12.

8.3

90

ATTACHMENT 1
ENROLLMENT DATA SHEET
KENTUCKY

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>a</u> <u>1988-89</u>	<u>1989-90</u>
High School	190333	192483	193310	195065	195877	195875	186477	.
% Change	.	1.1	0.4	0.9	0.4	-1.0	-3.8	.
b) Vocational	51452	45584	47387	44879	44110	43787	43500	.
% Change	.	-11.4	4.0	-5.3	-1.7	-0.7	-0.7	.
Agriculture	16128	15882	14579	14038	14172	14414	14500	.
% Change	.	-1.5	-8.2	-3.7	1.0	1.7	0.6	.
Business	31492	39660	45380	54749	58572	63071	63100	.
% Change	.	25.9	14.4	20.6	7.0	7.7	0.0	.
Health	2359	2368	2216	2243	2371	2456	2450	.
% Change	.	0.4	-6.4	1.2	5.7	3.6	-0.2	.
Non-Occ. Hm Ec	49408	45334	44062	43731	45319	53471	55000	.
% Change	.	-8.2	-2.8	-0.8	3.6	18.0	2.9	.
Occ. Home Ec	1836	1536	1505	1435	1429	1592	1550	.
% Change	.	-16.3	-2.0	-4.7	-0.4	11.4	-2.6	.
Marketing	7556	6722	6687	6642	6642	6603	6600	.
% Change	.	-11.0	-0.5	-0.7	0.0	-0.6	-0.0	.
Ind Arts	19932	19911	18510	20977	20826	26533	26700	.
% Change	.	-0.1	-7.0	13.3	-0.7	27.4	0.6	.
T & I	18085	16754	16080	15669	15752	16299	16300	.
% Change	.	-7.5	-3.9	-2.6	0.5	3.5	0.0	.
c) Other	7657	5801	5741	5735	5973	5724	5700	.
% Change	.	-24.2	-1.0	-0.1	4.1	-4.2	-0.4	.
d) Other	234	208	265	260	207	348	325	.
% Change	.	-11.1	27.4	-1.9	-20.4	68.1	-6.6	.
e) Other	356	980	628	955	1271	1350	1400	.
% Change	.	175.3	-35.9	52.1	33.1	6.2	3.7	.

a) Figures for 1988-89 Vocational Enrollments are projected.

b) Includes only 11-12 graders enrolled in occupational preparation programs. Data are duplicated counts.

c) Special Needs

d) Public Service Occupations

e) Academic/Vocational

NOTE: High school Enrollments are nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
LOUISIANA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	222198	222959	222021	220796	216882	209848	207639	.
% Change	.	0.3	-0.4	-0.6	-1.8	-3.2	-1.1	.
Vocational	138600	149017	155753	148885	131169	136815	135572	120865
% Change	.	7.5	4.5	-4.4	-11.9	4.3	-0.9	-10.8
Agriculture	155116	16344	17117	15669	13827	.	14171	10876
% Change	.	5.3	4.7	-8.5	-11.8	.	.	-23.3
Business	555117	60807	65982	64211	57327	.	58639	52108
% Change	.	9.5	8.5	-2.7	-10.7	.	.	-11.1
Health	1031	832	1027	1223	1028	3186	1088	.
% Change	.	-19.3	23.4	19.1	-15.9	.	.	-65.9
Non-Occ Hm Ec	14614	16158	27690	30584	29932	31260	27427	.
% Change	.	10.6	71.4	10.5	-2.1	.	.	-12.2
Occ Home Ec	17458	18849	8019	4481	1989	2480	956	.
% Change	.	8.0	-57.5	-44.1	-55.6	.	.	-61.5
Marketing	4516	4178	3727	3540	2173	3186	3855	.
% Change	.	-7.5	-10.8	-5.0	-38.6	.	.	21.0
Ind Arts	17739	19778	22893	22345	20234	17324	15307	.
% Change	.	11.5	15.7	-2.4	-9.4	.	.	-11.6
T & I	7843	8432	7853	6036	4633	6297	5191	.
% Change	.	7.5	-6.9	-5.1	-23.2	.	.	-17.6
a Other	529	356	141	79	-16	986	3075	.
% Change	.	-32.7	-60.4	-44.0	-79.7	.	211.9	.
b Other	3837	3283	1304	-717	-10	982	.	.
Other	.	-14.4	-60.3	-45.0	-98.6	.	.	.
% Change	.	.	.	.	.	.	.	.

NOTE: All data are nonduplicated counts for grades 9-12.

- a) Technical
- b) Not Elsewhere Classified

ATTACHMENT 1
ENROLLMENT DATA SHEET

		MAINE							
		1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
High School % Change	67464 . -3.9	64866 -3.9	63759 -1.7	63329 -0.7	63601 0.4	61810 -2.8	59446 -3.8		
a Vocational % Change	9015 . -4.3	8627 -4.3	7828 -9.3	7595 -3.0	7515 -1.1	7439 -1.0	7286 -2.1		
Agriculture % Change	441 . -16.7	376 -4.8	358 -4.2	343 -4.2	329 -4.1	333 1.2	278 -16.5		
Business % Change	757 . -1.1	749 -11.2	665 -3.3	643 -3.3	648 0.8	628 -3.1	626 -0.3		
Health % Change	616 . -10.2	553 -14.5	473 -11.8	417 -11.8	376 -9.8	344 -8.5	374 8.7		
Non-Occ Hm Ec % Change	7843 . -10.5	7617 -10.5	7075 0.8	7019 -0.8	7333 4.5	7603 3.7	7193 -5.4		
Occ Home Ec % Change	580 . -0.2	579 -12.8	505 10.9	560 10.9	565 0.9	586 3.7	607 3.6		
Marketing % Change	416 . -7.5	385 -4.4	368 -7.1	342 -7.1	314 -8.2	318 1.3	297 -6.6		
Ind Arts % Change	.	.	.	.	.	.	.
T & I % Change	4415 . -5.6	4196 -10.6	3753 -0.1	3751 -0.1	3619 -3.5	3578 -1.1	3452 -3.5		
b Other % Change	260 . 6.5	277 -15.9	253 4.3	243 -5.3	230 -5.3	208 -9.6	211 1.4		
c Other % Change	1530 . -2.1	1498 -1.7	1473 -12.0	1296 -12.0	1413 9.0	1418 0.4	1401 -1.2		
d Other % Change	.	14 .	.	.	21 .	26 23.8	40 53.8		

a) Vocational Enrollment does not include Non-Occupational Home Economics.

b) Diversified Occupations

c) Cooperative Education

d) Basic Skills

NOTE: Vocational Enrollments are for 11th & 12th grades only. High school enrollments are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

	MARYLAND				
	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>
High School	223291	223533	220255	218219	212593
% Change	-2.5	-1.5	-0.9	-2.6	-4.1
a Vocational	160570	154928	154239	144048	140279
% Change	-3.9	-3.5	-0.4	-6.6	-2.6
Agriculture	3447	3231	2823	2885	2584
% Change	-6.3	-12.6	2.2	-10.4	-6.9
Business	48444	45503	47031	44751	43015
% Change	-6.1	3.4	-4.8	-3.9	0.3
Health	1684	1712	1554	1548	1304
% Change	.	1.7	-9.2	-0.4	-15.8
b Non-Occ Hm Ec	81372	81058	76693	78967	71542
% Change	.	-0.4	-5.4	3.0	-9.4
c Occ Home Ec	1197	1662	2725	2664	2757
% Change	38.8	64.0	-2.2	3.5	1.9
Marketing	2323	2210	2256	2224	2095
% Change	.	-4.9	2.1	-1.4	-5.8
d Inc Arts	95071	86003	89691	65948	69439
% Change	.	-9.5	4.3	-26.5	5.3
e T & I	20423	1788	14926	14724	14097
% Change	.	-12.4	-16.6	-1.4	-4.3
d Other	7875	7115	6781	6337	6508
% Change	.	-9.7	-4.7	-6.5	2.7
e Other	282	19	139	139	146
% Change	.	-32.3	-27.2	0.0	5.0
Other	.	.	.	.	.
% Change	.	.	.	.	.

a) Does not include Industrial Arts Enrollments
 b) Nonduplicated data for grades 6-12; reporting procedures for Industrial Arts changed in 1985-86 to include only first session enrollments.

c) "Food Production/Management/Services" programs moved for T&I to Occupational Home Ec in 1983-84/1984-85.
 d) General Cooperative
 e) Technical

NOTE:
 All data (except that for Non-Occupational Home Economics and Industrial Arts) were for grades 9-12, all data are nonduplicated counts.

ATTACHMENT 3
ENROLLMENT DATA SHEET
MASSACHUSETTS

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	^a <u>1988-89</u>	^a <u>1989-90</u>
High School % Change	311994 . .	300559 -3.7	295322 -1.7	285274 -3.4	274536 -3.8	260278 -5.2	245658 -5.6	235350 -4.2
b Vocational % Change	147376 . .	145089 -1.6	123125 -15.1	133050 8.1	122507 -7.9	107956 -11.9	70427 -34.8	66083 -6.2
Agriculture % Change	1738 . .	1460 -18.3	1257 -13.9	1415 12.6	1451 2.5	1416 -2.4	1408 -0.6	974 -30.8
Business % Change	92293 . .	96651 4.7	78441 -18.8	85134 8.5	75084 -11.8	56664 -24.5	25781 -54.5	22062 -14.4
Health % Change	2384 . .	1953 -18.1	1918 -1.8	2124 10.7	2171 2.2	2093 -3.6	1686 -19.4	1609 -4.6
Non-Occ Hm Ec % Change	36203 . .	37570 3.8	31798 -15.4	34461 8.4	32915 -4.5	22045 -33.0	25473 15.6	f .
Occ Home Ec % Change	2774 . .	2157 -22.2	1857 -13.9	2988 60.9	2219 -25.7	e 6877 209.9	2512 -63.5	2600 3.5
Marketing % Change	4838 . .	4573 -5.5	4086 -10.6	4588 12.3	4926 7.4	4023 -18.3	3386 -15.8	2890 -14.6
Ind Arts % Change	58300 . .	55012 -5.6	42682 -22.4	45170 5.8	37983 -15.9	32357 -14.8	31214 -3.5	31508 8 .
T & I % Change	40270 . .	35552 -11.7	33231 -6.5	33905 2.0	34115 0.6	32930 -3.5	28845 -12.4	28845 9.2
c Other % Change	3029 . .	2743 -9.4	2335 -14.9	2896 24.0	2541 -12.3	3953 55.6	6809 72.2	4440 -34.8
d Other % Change	806 . .	1025 27.2	724 -29.4	3423 372.8	1289 -62.3	1510 17.1	. .	571
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

- a) Beginning in 1988-89, reporting process was changed to include only those programs funded through Perkins. In addition, only those programs meeting certain audit standards were counted--hence, the apparent large decline in VE total.
- b) Vocational total does not include non-Occupational Home Ec, Industrial Arts or Not Elsewhere Classified enrollments.
- c) Technology Education
- d) Not Elsewhere Classified (includes Exploratory)
- e) There was a misunderstanding among several districts about how to report Occupational Home Ec enrollments, so this figure is inconsistent with that available for other years.
- f) Non-Occ. Home Economics is no longer compiled in our annual report.

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ATTACHMENT 1
ENROLLMENT DATA SHEET

		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School		518100	505632	501634	499259	489669	475958	451696	430038
% Change		-2.4	-0.8	-0.5	-1.9	-2.8	-5.1	-4.8	-4.8
a Vocational		111323	108639	104037	103052	99928	93518	89653	84450
% Change		-2.4	-4.2	-0.9	-3.0	-6.4	-4.1	-5.6	-5.6
b Agriculture		10351	9282	9018	8423	8323	8059	7229	6686
% Change		-10.3	-2.8	-6.6	-1.2	-3.2	-10.3	-7.5	-7.5
Business		21540	21376	21373	20467	19010	16757	16041	15400
% Change		-0.8	-0.0	-4.2	-7.1	-11.9	-6.3	-4.0	-4.0
Health		8205	8616	7620	7476	6394	5761	5350	5181
% Change		5.0	-11.6	-1.9	-14.5	-9.9	-7.1	-3.2	-3.2
c Non-Occ Hm Ec		72676	64329	66018	70829	67737	65284	65216	61678
% Change		-11.5	2.6	7.3	-4.4	-3.6	-0.1	-5.4	-5.4
Occ Home Ec		11018	10523	10242	9773	9187	8825	9060	7705
% Change		-4.5	-2.7	-4.6	-6.0	-3.9	2.7	-15.0	-15.0
Marketing		16503	16497	15650	17458	19331	17081	16819	15578
% Change		-0.0	-5.1	11.6	10.7	-11.6	-1.5	-7.4	-7.4
Ind Arts		.							
% Change		.	.	.	.	.	.	.	.
d T & I		43706	42345	40134	39455	37683	37035	35154	33700
% Change		-3.1	-5.2	-1.7	-4.5	-1.7	-5.1	-4.1	-4.1
Other		.	.	.	.	.	.	.	.
% Change		.	.	.	.	.	.	.	.
Other		.	.	.	.	.	.	.	.
% Change		.	.	.	.	.	.	.	.
Other		.	.	.	.	.	.	.	.
% Change		.	.	.	.	.	.	.	.

- a) Does not include Non-Occupational Home Economics.
- b) Includes CIP Codes 01 and 03.
- c) May include counts of students who were also enrolled in wage earning programs.
- d) Includes CIP codes 09, 12, 43, 46-49.

NOTE: All data (except that for Non-Occupational Home Economics) are nonduplicated counts; all data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
MINNESOTA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	240742 -0.9	238658 -0.4	237590 -0.4	236622 -0.4	232004 -2.0	224902 -3.1	215671 -4.1	.
a Vocational % Change	112469 -1.1	111214 -1.1	101300 -8.9	102307 1.0	102438 0.1	96473 -5.8	.	.
Agriculture % Change	14893 -1.6	14662 -10.2	13160 -10.2	12143 -0.1	13057 -0.7	10406 -20.3	.	.
Business % Change	21249 -1.5	20923 -8.3	19183 -8.3	21310 11.1	25294 16.7	24315 -3.9	.	.
Health % Change	1698 -0.3	1693 -4.8	1611 -4.8	1274 -20.9	1015 -20.3	868 -14.5	.	.
Non-Occ Hm Ec % Change	41649 -1.9.	40870 -6.3	38290 -6.3	37521 -2.0	33600 -10.5	33022 -1.7	.	.
Occ Home Ec % Change	.	.	.	.	3008 .	2195 -27.0	.	.
Marketing % Change	5624 -0.8	5578 -7.8	5145 -7.8	5410 5.2	5797 7.2	5843 0.8	.	.
Ind Arts % Change	.	.	.	.	.	.	.	.
T & I % Change	21748 -1.8	21352 -12.4	18706 -12.4	18861 0.8	17166 -9.0	15932 -7.2	.	.
Other % Change	.	.	.	.	3501 .	3897 11.3	.	.
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.

a) Total Vocational Enrollment does not include Non-occupational Home Economics.

ATTACHMENT 1
ENROLLMENT DATA SHEET

	MISSISSIPPI						
	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
High School % Change	226141 . -0.6	224743 1.4	221559 -1.4	218778 -1.3	217335 -0.7	215685 -.8	210579 -2.4
Vocational % Change	102483 . 1.4	103950 3.6	105471 1.5	108311 2.7	108612 0.3	97353 -10.4	94060 -3.4
Agriculture % Change	14595 . 5.7	15120 3.6	15689 3.8	15227 -2.9	14770 -3.0	12602 -14.7	11687 -7.3
Business % Change	2972 . .	3141 41.1	3390 7.9	3585 5.8	3376 -5.8	3550 5.2	3840 8.2
Health % Change	214 . .	302 41.1	325 7.6	292 -10.2	221 -24.3	251 13.6	458 82.5
Non-Occ Hm Ec % Change	40260 . 2.8	41401 1.1	41852 6.1	44424 -0.5	44197 -17.9	36286 -7.3	33654 -7.3
Occ Home Ec % Change	2051 . 12.7	2312 9.0	2519 -4.8	2398 -23.9	1825 56.8	2862 14.0	3264 62.5
Marketing % Change	5234 . -.1	5231 -0.1	5195 -0.7	5033 -3.1	6524 29.6	5680 -12.9	5655 -0.4
Ind Arts % Change	23700 . -3.4	22886 0.5	23011 2.3	23530 -3.8	22632 -6.3	21199 -0.4	3798 16.4
T & I % Change	11959 . -.6	11892 -0.6	11636 -2.2	11774 1.2	12869 9.3	12943 0.6	12647 -2.3
a Other % Change	1492 . 8.8	1624 7.0	1737 6.6	1851 5.8	1959 -29.4	1383 -43.9	19154 -9.3
b Other % Change	6 . 583.3	41 185.4	117 68.4	197 21.3	239 149.8	597 58.0	1141 21.0
c Other % Change	. . .	. .	. .	. .	. .	. .	22 69 213.6

- a) Occupational Preparation for handicapped
- b) Diversified Tech
- c) Single Parent

NOTE: Data represent nonduplicated enrollments for grade levels 7-12.

ATTACHMENT 1 SHEET
ENROLLMENT DATA SHEET
MISSOURI

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	255784 . -2.5	249298 -.2	248731 0.9	250910 0.1	251258 2.6	245086 -1.5	238591 -2.5	231550 -3.0
a Vocational % Change	127951 . -6.8	121771 -1.8	115236 -5.4	115478 0.2	118732 2.8	116929 -1.5	119397 1.1	110317 -7.6
Agriculture % Change	14764 . -1.8	14505 -1.8	13206 -9.0	12986 -1.7	13244 2.0	13017 -1.7	13363 2.7	13577 1.6
Business % Change	1646 . -5.7	11211 -5.5	10703 -4.5	9661 -11.6	9124 -5.6	9280 1.7	9895 6.6	9406 -4.9
Health % Change	1700 . -5.5	1606 -11.0	1429 -7.4	1323 -7.4	1296 -2.0	1156 -10.8	1200 3.8	1241 3.4
Non-Occ Hm Ec % Change	69512 . -3.7	66926 -5.4	63279 -4.7	66282 3.9	68883 -1.7	67681 0.2	67820 0.2	60459 -10.9
Occ Home Ec % Change	1461 . 2.2	1493 -8.4	1367 -9.3	1240 -1.0	1228 -5.7	1158 13.0	1308 -12.1	1308 -7.4
Marketing % Change	9317 . -2.4	9091 -5.8	9618 -3.1	9322 9.7	10226 5.1	10747 5.1	11140 3.7	10954 -1.7
Ind Arts % Change	76797 . -9.2	69766 -6.1	65536 -5.1	62181 63.3	101545 -2.4	99082 -1.7	97420 -1.7	95376 -2.1
T & I % Change	19551 . -13.4	16939 -7.7	15634 -4.9	14862 -0.9	14731 -5.7	13890 -1.4	13695 -8.0	12604 -8.0
b Other % Change	2593 . 37.3	3561 -5.1	3380 -7.6	915 20.1	823 -10.1	823 18.6	976 -11.4	865 -11.4
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.

a) Vocational Enrollment does not include Industrial Arts & Special Needs.

b) Special Needs; due to duplication in prior counting procedures, only Vocational Preparation Enrollment was collected for Special Needs Programs in 1985-86 and beyond.

NOTE: All Enrollment data (except Industrial Arts and Special Needs) are nonduplicated counts for grades 9-12.

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ATTACHMENT 1
ENROLLMENT DATA SHEET
MONTANA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	45089 .0	45378 .6	45616 .5	45951 .7	46755 -.4	46177 -.4	42747 -.3	41421 -.3
b Vocational % Change	21440 .0	21535 .4	21395 -.7	20999 -1.9	32074 52.7	22120 -31.0	28444 28.6	e 37324 31.2
Agriculture % Change	3394 -.7	3236 -3.6	3119 -2.1	3052 12.8	3443 -30.4	2398 -30.4	2817 17.5	3419 21.4
Business % Change	5282 .0	5904 11.8	5583 -5.4	6135 9.9	13871 126.1	8791 -36.6	12456 41.7	15051 20.8
Health % Change	.0	.	.	.	.	.	.	.
Non-Occ Hm Ec % Change	8068 -2.9	7835 5.0	8228 -8.8	7508 0.6	7553 -44.9	4160 52.4	6340 52.4	11493 81.3
Occ Home Ec % Change	.0	.	.	.	980	1507 53.8	980 -35.0	980 0.0
Marketing % Change	1007 4.5	1052 0.5	1057 -2.8	1027 51.2	1553 -44.6	860 83.1	1575 -17.0	1508 -17.0
c Ind Arts % Change	.0	.	.	.	3605 77.8	6409 -15.4	5419 5.7	5726 73.5
T & I % Change	3689 -4.9	3508 -2.9	3408 -3.8	3277 42.6	4674 -5.8	4406 -2.9	4276 -2.9	5073 18.6
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.

- a) Vocational data for 1986-87 and beyond include 7th and 8th grades; data collection process was changed to accommodate funding system.
- b) Vocational Enrollment does not include Industrial Arts.
- c) Industrial Arts was prevocational until 1984-85; hence no prior data is available.
- d) State funding for vocational was not available for this year--hence, data collection was difficult and far from consistent.
- e) Reflects increased emphasis on middle school data.

NOTE: All vocational data are duplicated counts. Figures for 1986-87 and beyond were not limited to schools which had been involved in the federal funding process. Data for 1989-90 include high school, junior high and middle school enrollments.

ATTACHMENT 1
ENROLLMENT DATA SHEET
NEBRASKA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	82991 . -1.8	81466 -.1	81380 0.2	81523 10.8	90367 -2.4	88235 -2.3	86167 -2.3	81745 -5.1
a Vocational % Change	132420 . -3.5	127849 -.2	125056 -1.8	122780 1.2	124194 2.6	127388 -0.5	126781 -0.5	125417 -1.1
Agriculture % Change	7846 . -4.1	7521 -4.5	7183 -1.9	7048 -0.9	6986 -1.3	6898 -1.3	7387 7.1	7575 2.5
Business % Change	49868 . -2.4	48689 -0.7	48324 1.0	48816 0.5	49068 3.6	50835 0.5	51090 0.5	50356 -1.4
Health % Change	366 . -23.6	279 49.5	417 -61.9	159 20.1	191 26.2	241 -35.7	155 -35.7	121 -21.9
Non Occ Hm Ec % Change	33751 . -2.2	32996 -5.8	31077 0.2	31132 -0.2	31077 3.7	32225 -0.3	32143 -0.3	32317 0.5
Occ Home Ec % Change	102 . 100.0	204 379.4	978 -52.1	468 177.1	1297 -67.6	420 -67.6	487 16.0	514 5.5
Marketing % Change	3263 . 3.0	3362 -10.0	3026 10.8	3352 11.1	3723 15.1	4285 -8.4	3927 -13.3	3406 -13.3
Ind Arts % Change	30997 . -6.0	29133 -4.6	27793 -3.4	26856 4.0	27924 -2.1	27345 -2.1	26706 -2.3	26125 -2.2
T & I % Change	6227 . -9.0	5665 10.5	6258 -20.9	4949 -20.9	3928 -20.6	5139 30.8	4886 -4.9	5003 2.4
b Other % Change	557 . -27.3	405 -7.7	374 -1.9	367 19.1	437 -1.8	429 -1.8	407 -5.1	1973 384.8
c Other % Change	.	.	.	.	.	.	5562 -48.5	4756 66.2
Other % Change	.	.	.	.	.	.	.	.

a) Vocational Enrollment does not include "Other" Enrollments.

b) Diversified Occupations

c) Vocational Special Needs

NOTE: All secondary vocational education delivered through comprehensive high schools; there are no area vocational schools. High School Enrollment data are nonduplicated counts; all vocational data are duplicated counts. All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
High School % Change	43297 . .	43899 1.4	46670 6.3	47878 2.6	49043 2.4	49244 0.4	49052 -0.4	49357 0.7	
a Vocational % Change	15427 . .	. .	13394 . .	15075 -2.4	13238 1.2	14076 6.3	10945 -22.2	12253 12.0	
Agriculture % Change	608 . .	. .	661 . .	618 -6.5	387 -37.4	416 7.5	452 8.7	499 10.4	
Business % Change	6663 . .	. .	5345 . .	5174 -3.2	5286 2.2	5935 12.3	5203 -12.3	6015 15.6	
Health % Change	140 . .	. .	. .	143 . .	153 7.0	139 -9.2	127 -8.6	163 28.3	
Non-Occ Hm Ec % Change	. .	. .	4812 . .	4373 -9.1	4416 1.0	5193 17.6	4679 -9.9	3524 -24.7	
Occ Home Ec % Change	296 . .	. .	170 . .	183 7.6	244 33.3	175 -28.3	211 20.6	302 47.1	
Marketing % Change	14 . .	. .	203 . .	164 -19.2	405 147.0	588 45.2	693 17.9	708 2.2	
Ird Arts % Change	. .	. .	1889 . .	1857 -1.7	1939 4.4	2225 14.7	3547 59.4	2214 -37.6	
T & I % Change	7706 . .	. .	7015 . .	6793 -3.2	6763 -0.4	6823 0.9	4259 -37.6	4566 7.2	
b Other % Change	126 . .	. .	624 . .	678 8.7	375 -44.7	. .	. .	. .
c Other % Change	. .	. .	. .	. .	. .	. .	107 11.9	112 11.2	
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

a) Vocational Enrollments do not include Non-Occupational Home Economics, Industrial Arts and "Other" Enrollments.

b) Not Elsewhere Classified

c) Theatre Design

NOTE: All Enrollment figures are nonduplicated counts for grades 9-12 except Non-occupational Home Economics and Industrial Arts figures which include duplicated counts through 1988-89.

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ATTACHMENT 1
ENROLLMENT DATA SHEET
NEW HAMPSHIRE

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
a High School % Change	23873 . -1.5	23526 -2.4	22960 0.5	23071 7.5	24806 1.5	25181 -4.3	24097 -4.3	22228 -7.8
b Vocational % Change	11962 . -3.1	11590 -4.5	11068 -3.2	10717 -3.2	11043 3.0	10722 -2.9	10206 -4.8	9381 -2.2
c Agriculture % Change	1837 . -14.5	1570 -2.9	1525 -4.6	1455 -2.3	1422 -2.3	1392 -2.1	1372 -1.4	1350 -1.6
d Business % Change	3585 . -2.7	3488 -2.7	3393 -14.4	2904 -14.4	3036 4.5	3122 2.8	2860 -8.4	2607 -8.8
e Health % Change	381 . 4.2	397 -9.6	359 -11.1	319 -11.1	283 -11.3	244 -13.8	315 29.1	344 9.2
f Non-Occ Hm Ec % Change	25273 . 11.2	28099 -2.0	27539 -6.0	25898 -6.0	27922 7.8	29097 4.2	29524 1.5	30849 4.5
g Occ Home Ec % Change	1010 . 11.1	1122 -13.8	967 . 3	1076 . 3	1059 -1.6	1091 3.0	1045 -4.2	1087 4.0
h Marketing % Change	857 . -3.4	828 -4.3	864 -0.7	858 -0.7	1039 21.1	898 -13.6	808 -10.0	800 -1.0
i Ind Arts % Change	27822 . -0.6	27642 -1.6	27206 -17.9	22331 -17.9	29739 33.2	28184 -5.2	27553 -2.2	27800 0.9
j T & I % Change	3924 . -6.2	3680 -7.7	3396 0.6	3416 0.6	3426 0.3	3274 -4.4	3182 -2.8	3178 -0.1
k Other % Change	148 . 53.4	227 -24.2	172 -5.2	163 -5.2	111 -31.9	134 20.7	139 3.7	103 -25.9
l Other % Change	220 . 26.4	278 41.0	392 34.2	526 26.8	667 26.8	567 -15.0	485 -14.5	510 5.2
m Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

a) Nonduplicated data for grades 11-12 only.
 b) Nonduplicated data for grades 11-12 only (some duplication possible in Agriculture and Special Ed programs). Total Vocational Enrollment does not include Non-Occupational Home Economics and Industrial Arts Enrollments.

c) Vocational Office Occupations only; Business Education is part of academic/general education.
 d) Nonduplicated 7 through 12 Enrollment. These programs are part of the State's General Education requirements; consequently, these Enrollments are not included in the total Vocational Enrollment figure. (High School is defines as grades 7 through 12 in this State.)

e) Diversified Occupations
 f) STEP - a specialized, multi-occupational, in-school program for vocational special needs students.

ATTACHMENT 1
ENROLLMENT DATA SHEET
NEW JERSEY

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
a High School % Change	360932 -2.6	371113 -2.6	366741 -1.7	358855 -1.6	346996 -3.3	328165 -5.4	.	.
b Vocational % Change	137975 -12.3	121072 4.2	126117 3.1	129979 0.3	130409 0.3	124702 -4.4	.	.
b Agriculture % Change	2434 -1.9	2387 -1.7	2346 -1.6	2308 -1.6	2239 -3.0	2127 -5.0	.	.
b Business % Change	208912 -2.0	206816 -2.0	201334 -1.7	198057 -1.6	192115 -3.0	182509 -5.0	.	.
b Health % Change	2486 -2.0	2437 -2.0	2395 -1.7	2356 -1.6	2285 -3.0	2170 -5.0	.	.
c Non-Occ Hm Ec % Change	72580 -2.0	71157 -2.0	69947 -1.7	68808 -1.6	66744 -3.0	63406 -5.0	.	.
Occ Home Ec % Change	.	.	.	.	.	.	.	.
b Marketing % Change	8654 -2.0	8485 -2.0	8341 -1.7	8205 -1.6	7958 -3.0	7560 -5.0	.	.
b Ind Arts % Change	112336 -2.0	110134 -2.0	108261 -1.7	106529 -1.6	103333 -3.0	98166 -5.0	.	.
b T & I % Change	32173 -2.0	31563 -2.0	31006 -1.7	30502 -1.6	29586 -3.0	28106 -5.0	.	.
d Other % Change	1989 -2.0	1950 -2.0	1916 -1.7	1885 -1.6	1828 -3.0	1736 -5.0	.	.
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.

- a) Nonduplicated 9-12 Enrollment
- b) Duplicated 9-12 Enrollment
- c) Includes total course enrollments in the Home Economics program area
- d) Technical

NOTE: 1982-83, 1984-85 and 1985-86 figures are projected based on actual 1983-84 data. This collection is compiled from district reports on a five-year cycle.

ATTACHMENT 1
ENROLLMENT DATA SHEET

a) Changes in reporting procedures for Postsecondary schools led a number of secondary schools to think data would no longer be reported directly to state. Therefore, the decreases in this year are due to erroneous reporting and not necessarily to an actual decline in vocational enrollments.

NOTE: High school enrollments are unduplicated for grades 7-12. Vocational enrollments are duplicated counts; data represent grades 7-12 except for a limited number of school districts where data are for grades 6-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
NEW YORK

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	934356 -2.0	915517 -0.8	908309 -1.7	892929 -2.6	869532 -4.0	834907 -5.2	791625 -5.2	.
a Vocational % Change	343011 -0.9	339768 -0.7	337308 -5.3	319457 -6.0	300369 -5.4	284241 -4.7	270818 -4.7	.
Agriculture % Change	9227 0.1	9232 -12.0	8128 -0.8	8061 -17.0	6689 -5.0	6357 -5.1	6030 -5.1	.
Business % Change	214330 -1.8	210513 -3.7	202772 -8.8	184986 -9.1	168229 -12.2	147755 -12.2	136777 -7.3	.
Health % Change	13726 4.9	14402 -12.1	12653 -12.9	11017 -10.9	9820 -9.0	8933 -9.6	8079 -9.6	.
Non-Occ Hm Ec % Change	.	.	.	.	.	.	.	.
Occ Homa Ec % Change	8817 -16.2	7391 40.0	10345 -23.8	7880 24.5	9812 3.1	10117 10.4	11170 10.4	.
Marketing % Change	15531 -5.7	14648 -6.1	13749 6.0	14302 0.8	14410 28.2	18480 17158	17158 -7.2	.
b Ind Arts % Change	197862 -5.9	186223 -10.0	167691 -15.2	142130 -5.6	134151 -17.8	110270 -10.6	98542 -10.6	.
T & I % Change	72689 -2.2	71073 7.7	76558 2.3	78342 -6.9	72963 1.9	74315 -4.0	71314 -4.0	.
c Other % Change	8691 43.9	12509 4.7	13103 13.5	14869 24.1	18446 -0.9	18284 -0.9	20090 -0.9	.
Other % Change	.	.	.	.	.	.	.	.
Other % Change	.	.	.	.	.	.	.	.

- a) Vocational Enrollments do not include Industrial Arts or Technology Education.
- b) In 1986-87, the program area of Industrial Arts was discontinued in New York and a new program entitled Technology took its place.
- c) Technical Education

NOTE: figures for all areas except Industrial Arts & Technology, are nonduplicated. All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		NORTH CAROLINA				
		1982-83	a. 1983-84	1984-85	1985-86	1986-87
High School % Change	321822 . -0.2	321253	323851	327105	326435	343092
Vocational % Change	222568 . -10.3	199663	225196	226857	230483	223699
Agriculture % Change	19099 . -10.3	17127	17307	16864	16584	15717
Business % Change	72536 . -2.2	70953	83288	85472	86230	82420
Health % Change	7026 . -16.5	5870	6224	6078	6270	6272
Non-Occ Hm Ec % Change	344621 . -14.8	29486	34319	31657	31584	30148
Occ Home Ec % Change	7101 . -27.2	5168	4910	5490	5730	5741
Marketing % Change	10722 . -12.4	9388	11653	12428	13903	14225
Ind Arts % Change	133337 . -6.3	12494	12980	14116	14227	13634
T & I % Change	48171 . -12.2	42314	45080	46015	47280	46532
b Other % Change	. .	. .	6.5	2.1	2.7	-1.6
c Other % Change	6508 . -37.8	4046	6025	6001	5594	5845
d Other % Change	3447 . -18.3	2817	3399	2636	2777	2648

a) Three local school systems were not included in the 1983-84 data.

b) Principles of Technology

c) Vocational Development

d) Special Programs

NOTE: All data were reported to be nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		NORTH DAKOTA						
		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>
High School % Change	35907 . -2.8	34892 0.5	35076 -0.6	34868 -0.3	34773 -0.4	34625 -0.4	33627 -2.9	32896 -2.2
a Vocational % Change	27118 . 1.2	27447 -7.3	25430 -5.4	24047 3.7	24938 -0.8	24734 -0.8	24460 -1.1	24370 -0.4
Agriculture % Change	5326 . -4.9	5064 -14.0	4353 -2.4	4250 -4.8	4044 -2.1	3961 -2.1	3851 -3.3	3960 3.4
b Business % Change	2458 . 2.4	2516 6.4	2678 -19.8	21448 11.0	2384 14.6	2731 1.5	2772 1.5	2801 1.0
Health % Change	439 . 26.0	553 -16.8	460 -27.0	336 3.0	346 18.5	410 18.5	421 2.7	400 -5.0
Non-Occ Hm Ec % Change	10236 . -1.9	10039 -7.0	9337 -0.8	9263 -5.1	8793 1.3	8908 -3.1	8632 -3.1	8340 -3.4
Occ Homo Ec % Change	445 . 6.1	472 -28.8	336 6.0	356 28.1	456 2.6	468 2.6	591 26.3	459 -22.3
Marketing % Change	1408 . -7.1	1308 22.1	1597 -5.6	1507 10.4	1663 -7.3	1542 -3.9	1482 -3.9	1531 3.3
Ind Arts % Change	4294 . 11.3	4780 -8.3	4384 -7.2	4067 12.3	4566 -7.5	4225 -7.5	4234 0.2	4533 7.1
T & I % Change	2470 . 8.3	2674 -16.0	2245 -6.5	2098 26.5	2654 -7.8	2446 -7.8	2467 0.9	2310 -6.4
c Other % Change	42 . -2.4	41 -2.4	40 -45.0	22 45.5	32 34.4	43 34.4	30 -30.2	36 20.0
d Other % Change	.	.	.	20	31	53	29	64
e Other % Change	.	.	.	55.0	71.0	-45.3	120.7	1828
				594	630	6.1	1696	7.8
				.	.	.	169.2	.

a) Vocational Enrollment does not include Sex Equity or Single Parent Programs.

b) Office Education Enrollments only; does not include Business Ed. Please note that the Enrollment system for Office Education changed in 1985-86.

c) Cooperative Education

d) Single Parent/Sex Bias

e) Sex Equity

NOTE: High School Enrollments are nonduplicated; Vocational Enrollments for occupational programs are nonduplicated, for non-occupational they are duplicated. All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

OHIO

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	594425 . .	587056 -1.2	584117 -0.5	587569 0.6	585716 -0.3	574121 -2.0	569328 -4.3	.
a Vocational % Change	238362 . .	231505 -2.9	222980 -3.7	219868 -1.4	223111 1.5	222822 -0.1	224207 0.6	.
Agriculture % Change	20256 . .	19392 -4.3	18995 -2.0	18596 2.1	18037 -3.0	17888 -0.8	17245 -3.6	.
Business % Change	25483 . .	24614 -3.4	23291 -5.4	22252 -4.5	21523 -3.5	20818 -3.3	19567 -6.0	.
Health % Change	4008 . .	4086 1.9	3774 -7.6	3461 -8.3	3497 1.0	3468 -0.8	3212 -7.4	.
Non-Occ Hm Ec % Change	103045 . .	101552 -1.4	986664 -2.8	99777 1.1	103903 4.1	104472 0.5	108484 3.8	.
Occ Home Ec % Change	7356 . .	6964 -5.3	6620 -4.9	6449 -2.6	6171 -4.3	6057 -1.8	6046 -0.2	.
Marketing % Change	19527 . .	19002 -2.7	18912 -0.5	18401 -2.7	18808 2.2	18891 0.4	19304 2.2	.
Ird Arts % Change	. .	. .	. .	. .	. .	. .	. .	.
T & I % Change	58687 . .	55895 -4.8	52724 -5.7	50932 -3.4	51172 0.5	51238 0.1	50349 -1.7	.
b Other % Change	9024 . .	8223 -8.9	6592 -19.8	8236 24.9	16616 101.7	12563 -26.4	17498 39.3	.
c Other % Change	. .	. .	. .	. .	1183	914	1347	.
Other % Change	. .	. .	. .	. .	. .	-22.7	47.4	.

a) Vocational Enrollment does not include "Other" Enrollments. Data are based on closing Enrollment.

b) Special Needs; increase in 1986-87 due to better identification and more service to special needs population.

c) Entrepreneurship

NOTE: High school Enrollments are nonduplicated; Vocational Enrollments are nonduplicated. All data are for grades 9-12. **128**

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ATTACHMENT 1
ENROLLMENT DATA SHEET

		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
	OKLAHOMA								
High School		170632	171122	173406	177876	173302	173536	166892	159431
% Change		0.3	1.3	2.6	-2.6	0.0	-3.7	-4.5	
a Vocational		73183	72299	71193	72662	72604	74196	73236	71476
% Change		-1.2	-1.5	2.1	-0.1	2.2	-1.3	-2.4	
Agriculture		18300	18122	17740	17570	18101	18199	18240	17683
% Change		-1.0	-2.1	-1.0	3.0	0.5	0.2	-3.1	
Business		4056	4027	4312	4318	3870	3890	4086	3933
% Change		-0.7	7.1	0.2	-10.4	0.5	5.0	-3.7	
Health		864	984	975	938	955	1028	1006	1009
% Change		13.9	-0.9	-3.8	1.8	7.6	-2.1	0.3	
Non-Occ Hm Ec		26484	26670	26322	28541	29451	30699	29963	30292
% Change		-0.1	-0.6	8.4	3.2	4.2	-2.4	1.1	
Occ Home Ec		1605	1660	1523	1550	1680	2057	2076	1975
% Change		3.4	-8.3	1.8	8.4	22.4	0.9	-4.9	
Marketing		3113	2967	3102	2997	3032	3196	3287	3141
% Change		-4.7	4.6	-3.4	1.2	5.4	2.8	-4.4	
b Ind Arts		.	.	.	1645	2218	2871	3728	2385
% Change		.	.	.	34.8	29.4	29.9	-36.0	
T & I		15834	15251	14327	14176	13376	15052	14493	13313
% Change		-3.7	-6.1	-1.1	-5.6	12.5	-3.7	-8.1	
c Other		2706	2663	2681	2436	2069	.	.	.
% Change		-1.6	0.7	-9.1	-15.1	.	.	.	
c Other		221	155	211	136	70	76	85	130
% Change		-29.9	36.1	-35.5	-48.5	8.6	11.8	52.9	
Other		.	.	.	.	.	.	.	.
% Change		.	.	.	.	.	.	.

a) Vocational Enrollments do not include Industrial Arts.

b) Not funded prior to 85-86.

c) CVET (Coordinated Vocational Education & Training); by 1987-88, all these programs had been merged into other occupational divisions.

d) Orientation. More recently, these programs are being offered in the summer months which are not included in the existing database.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	144855 . .	146302 1.0	148208 1.3	149143 0.6	147811 -0.9	145017 -1.9	140533 -3.1	. .	. .
a Vocational % Change	39173 . .	37530 -4.2	36700 -2.2	37771 2.9	42335 12.1	44914 6.1	45482 1.3	. .	. .
Agriculture % Change	4766 . .	4845 1.7	4714 -2.7	5174 9.8	5824 12.6	6356 9.1	6163 -3.0	. .	. .
Business % Change	18085 . .	17514 -3.2	17609 0.5	17583 -0.1	20038 14.0	20261 1.1	20079 -0.9	. .	. .
Health % Change	597 . .	608 1.8	342 -43.8	331 -3.2	446 34.7	518 16.1	525 1.4	. .	. .
Non-Occ Hm Ec % Change	. .. .	. .	. .	. .	. .	. .	. .	. .	. .
Occ Home Ec % Change	2472 . .	2200 -11.0	2019 -8.2	1953 -3.3	2193 12.3	2901 32.3	3178 9.5	. .	. .
Marketing % Change	2545 . .	2466 -3.1	2485 0.8	2933 18.0	3596 22.6	3561 -1.0	3672 3.1	. .	. .
Ind Arts % Change	. .. .	. .	. .	. .	. .	. .	. .	. .	. .
T & I % Change	10708 . .	9897 -7.6	9531 -3.7	9797 2.8	10238 4.5	11317 10.5	11865 4.6	. .	. .
b Other % Change	. . . .	444 .	1727 289.0	1592 -7.8	1992 25.1	2603 30.7	2802 7.6	. .	. .
Other % Change	. .. .	. .	. .	. .	. .	. .	. .	. .	. .
Industrial Arts % Change	. .. .	. .	. .	. .	. .	. .	. .	. .	. .

a) Vocational Enrollments do not include "Other" Enrollments.

b) Not Elsewhere Classified (includes Diversified Occupations, Hospitality, Recreation, Tourism, and various cluster combinations for unusual occupation mixes).

NOTE: Enrollment is collected only for those programs eligible for Carl Perkins funds; hence no data on Home Economics and Industrial Arts. All reported Enrollment data are nonduplicated counts for grades 9-12.

**ATTACHMENT 1
ENROLLMENT DATA SHEET
PENNSYLVANIA**

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	589698	573623	565807	562049	546825	529564	500407	480491
% Change	-2.7	-1.4	-0.7	-2.7	-3.2	-5.5		-4.0
a Vocational	242069	225449	205762	188933	168555	150507	130718	
% Change	-6.9	-8.7	-8.2	-10.8	-10.7		-13.1	
Agriculture	12728	11718	11122	10267	9443	8445	6918	
% Change	-7.9	-5.1	-7.7	-8.0	-10.6		-18.1	
Business	61146	56198	50322	45108	39966	35640	26276	
% Change	-8.1	-10.5	-10.4	-11.4	-10.8		-26.3	
Health	4866	5168	5081	4557	4210	3593	3262	
% Change	6.2	-1.7	-10.3	-7.6	-14.7		-9.2	
Non-Occ Hm Ec	54728	50698	44846	46338	45307	37439	32390	
% Change	-7.4	-11.5	3.3	-2.2	-17.4		-13.5	
Occ Home Ec	10032	9845	9002	8419	7502	6613	6185	
% Change	-1.9	-8.6	-6.5	-10.9	-11.9		-6.5	
Marketing	8856	7684	7071	6263	5809	5202	4564	
% Change	-13.2	-8.0	-11.4	-7.2	-10.4		-12.3	
Ind Arts	.	.	.	.	.	600	540	
% Change								
T & I	68686	64511	59569	54848	50822	48330	45604	
% Change	-6.1	-7.7	-7.9	-7.3	-4.9		-5.6	
Other	12200	11088	10983	5686	5476	5245	5519	
% Change	-9.1	-0.9	-48.2	-3.7	-4.2		5.2	
b Other	8827	8539	7766	7477	.	.		
c Other	.	-3.3	-9.1	-3.7	.	.		
% Change								

a) Vocational Enrollment does not include Industrial Arts. In 1987-88 the PDE began approving programs in Industrial Arts.

b) Not Elsewhere Classified (beginning in 1985-86, Work Experience enrollments were no longer collected).

c) Technical Education, as of 1986-87, Technical Education is included in T&I.

NOTE: All data are nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

RHOOE ISLAND

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	46065 . -5.0	43775 -1.9	42933 -3.0	41624 -4.3	39835 -5.4	37679 -5.4	36188 -4.0	36188 -4.0
a Vocational % Change	35044 37689 -6.3	35312 -12.0	31057 -7.8	28635 -7.4	26503 -11.1	23573 -11.1	22143 -6.1	22143 -6.1
Agriculture % Change	841 771 -8.3	765 -0.8	501 -34.5	533 6.4	397 -25.5	155 -61.0	82 -47.1	82 -47.1
Business % Change	15275 16222 6.2	14876 -8.3	13905 -6.5	12459 -10.4	13184 5.8	10724 -18.7	9761 -9.0	9761 -9.0
Health % Change	430 237 -44.9	322 35.9	311 -3.4	300 -3.5	230 -23.3	249 8.3	387 55.4	387 55.4
Non-Doc Hm Ec % Change	13860 15969 15.2	15596 -2.3	12226 -21.6	11742 -4.0	9386 -20.1	9650 2.8	9710 0.6	9710 0.6
Dcc Home Ec % Change	. .	. .	. .	. .	. .	. .	. .	. .
Marketing % Change	728 691 -5.1	512 -25.9	566 10.5	389 -31.3	287 -26.2	270 -5.9	256 -5.2	256 -5.2
Ind Arts % Change	725 1664 101.9	1786 22.0	1937 8.5	8038 315.0	7996 0.5	6994 -12.5	6771 -3.2	6771 -3.2
T & I % Change	3910 3799 -2.8	3241 -14.7	3548 9.5	3212 -9.5	3019 -6.0	2525 -16.4	1947 -22.9	1947 -22.9
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .
Other % Change	. .	. .	. .	. .	. .	. .	. .	. .

a) Vocational Enrollment does not include Industrial Arts.

NOTE: Vocational Enrollments are nonduplicated counts from 1986-87 to present. In previous reporting these data were duplicated counts.

In previous reporting these data were

ATTACHMENT 1
ENROLLMENT DATA SHEET
SOUTH CAROLINA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	185257 .1.4	182661 .0.4	181949 0.5	182787 1.3	185131 -0.1	184953 -0.1	179079 -3.2	.
Vocational % Change	125917 .1.1	125249 -1.5	123335 -5.9	116000 0.1	116066 -1.7	114044 -6.0	107151 -6.0	108461 1.2
Agriculture % Change	9042 .2.2	8845 -9.8	7975 -8.6	7293 -8.5	6673 -2.3	6518 -6.6	6086 -5.6	5743 -5.6
Business % Change	39021 .2.9	40172 -19.3	43907 -1.0	43476 2.0	44342 -0.6	44091 -5.8	41543 -1.7	42263 1.7
Health % Change	1228 .21.4	1491 -19.3	1203 -6.5	1125 21.2	1363 -3.8	1311 -15.4	1109 0.1	1110 0.1
Non-Occ Hm Ec % Change	28776 .1.3	28397 -3.1	27512 -15.1	23344 -1.9	22904 -4.9	21779 -6.1	20453 -2.4	19961 -2.4
Occ Home Ec % Change	1839 .12.5	2069 -11.0	1841 6.1	1953 -13.1	1697 5.8	1795 -2.6	1748 7.4	1877 7.4
Marketing % Change	4357 .1	3982 -8.6	3763 -5.5	3529 -6.2	3668 3.9	3722 -1.5	3622 -2.7	3316 -8.4
Ind Arts % Change	4339 .1	4144 -4.5	4253 2.6	3937 -7.4	3773 -4.2	3724 -1.3	3365 -36.5	2227 -5.8
T & I % Change	22765 .1	23485 3.2	20416 -13.1	19565 -4.2	19501 -0.3	20242 3.8	18392 -9.1	16695 1.6
a Other % Change	12550 .1	12655 0.8	12465 -1.5	11778 -5.5	12145 3.1	10862 -10.6	8998 -17.2	6436 -6.2
b Other % Change	.	.	.	.	.	.	2835 .	3651 28.8
c Other % Change	.	.	.	.	.	.	.	1200

- a) Prevocational
- b) Industrial Technology Education
- c) Applied Vocational Math and Principles of Technology

NOTE: All data are nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
SOUTH DAKOTA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	37330	36158	36085	36007	35633	35066	34001	36645
% Change	-3.1	-0.2	-0.2	-1.0	-1.6	-3.0	-3.0	7.8
Vocational	17858	18694	18825	14738	16385	15061	14696	15330
% Change	4.7	0.7	-21.7	11.2	-8.1	-2.4	-4.3	
Agriculture	32221	3345	3156	3003	3435	3604	3400	3451
% Change	3.8	-5.7	-4.8	14.4	4.9	-5.7	1.5	
Business	662	681	593	659	816	631	620	501
% Change	-2.9	-12.9	11.1	23.8	-22.7	-1.7	-19.2	
Health	354	324	264	256	247	217	209	196
% Change	-8.5	-18.5	-3.0	-3.5	-12.1	-3.7	-6.2	
Non-Occ Hm Ec	10127	11630	11528	8236	9469	8162	7854	8764
% Change	12.9	0.9	-28.6	15.0	-13.8	-3.8	-11.6	
Occ Home Ec	208	193	188	185	171	147	281	322
% Change	-7.2	-2.6	-1.6	-7.6	-14.0	91.2	14.6	
Marketing	1144	863	833	765	780	790	702	600
% Change	-26.3	-1.2	-8.2	2.0	1.3	-11.1	-14.5	
Ind Arts	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
T & I	2142	1878	2263	1634	1467	1510	1432	1333
% Change	-12.3	20.5	-27.8	-10.2	2.9	-5.2	-6.9	
a Other	.	.	.	.	.	.	198	163
% Change	.	.	.	.	.	.	-17.7	
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.

b) Special Needs

NOTE: High school Enrollments are nonduplicated; Vocational Enrollments are duplicated. All data are for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
TENNESSEE

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	457850 -10.0	453419 -1.2	448116 -0.9	444071 0.1	444318 0.1	439938 -1.0	436384 -0.8	431910 -1.0
a Vocational % Change	152580 -0.3	191110 -6.7	178294 5.0	187126 5.0	194092 3.7	187729 -3.3	179402 -4.4	181394 1.1
Agriculture % Change	19604 -0.4	19537 -7.6	18048 2.4	18475 3.7	19163 -5.0	18196 -0.4	18126 -0.4	17253 -4.8
Business % Change	18929 -7.1	20271 -5.7	19108 19.1	22752 14.0	25940 4.7	27150 -6.4	25402 -6.4	25366 -0.1
Health % Change	3482 28.7	4483 -10.1	4029 -4.4	3850 3.2	3974 0.2	3983 1.6	4046 1.6	4209 4.0
Non-Occ Hm Ec % Change	53820 -9.0	48969 -2.7	47646 0.7	47982 -3.0	46566 -0.6	46265 -9.2	42008 -9.2	44884 6.8
Occ Home Ec % Change	6957 -	5282 -24.1	6429 21.7	8939 39.0	6714 -24.9	6619 -1.4	7069 -1.4	7069 6.8
Marketing % Change	10659 1.9	10858 -5.1	10307 2.5	10564 5.1	11099 2.6	11384 0.4	11432 0.4	11261 -1.5
Ind Arts % Change	36718 -	33594 -8.5	33449 -0.4	33013 -1.3	28246 -14.4	26117 -7.5	25374 -7.5	25374 -2.8
T & I % Change	46086 -6.4	43122 -6.7	40217 -8.1	43477 3.9	45188 0.5	45418 -0.9	44998 -0.9	45374 0.8
b Other % Change	195 -	63 -67.7	148 134.9	210 41.9	373 77.6	654 75.3	604 -7.6	604 -7.6
c Other % Change	16352 -	17444 6.7	14804 -15.1	14360 -3.0	14196 -1.1	12922 -9.0	13092 1.3	13092 1.3
d Other % Change	-	-	-	-	-	1487 .	2777 .	2777 86.8

- a) Vocational Enrollment does not include Special or Pilot Programs.
- b) Technical Education
- c) Special Programs
- d) Pilot programs

NOTE: All data are for grades 6-12. Vocational data are duplicated counts; High School Enrollment are nonduplicated.

ATTACHMENT 1
ENROLLMENT DATA SHEET

		<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
	High School	857103	868761	891337	906419	892061	-1.6	917519	
a	% Change	1.4	2.6	1.7	-1.6			2.9	
a	Vocational	379536	387796	391624	399135	390143	401187	444161	
a	% Change	2.2	1.0	1.9	-2.3		2.8	10.7	
	Agriculture	60138	59687	55936	54493	55307	58239	86282	
a	% Change	-0.7	-6.3	-2.6	1.5		5.3	48.2	
	Business	27242	29440	30313	32159	33159	35573	45741	
a	% Change	8.1	3.0	6.1	3.1		7.3	28.6	
	Health	6356	6599	5671	5951	6330	6458	7534	
a	% Change	3.8	-14.1	4.9	6.4		2.0	16.7	
	Non-Occ Hm Ec	195147	202265	205548	190272	178900	184743	181859	
a	% Change	3.6	1.6	-7.4	-6.0		3.3	-1.6	
b	Occ Home Ec	.	.	.	20801	20811	20925	20376	
a	% Change					0.0	0.5	-2.6	
	Marketing	26520	27467	29760	29663	30011	29970	26221	
a	% Change	3.6	8.3	-0.3		1.2	-0.1	-12.5	
	Ind Arts	1710	1556	3343	4393	.	.	.	
a	% Change		-9.0	114.8	31.4				
T	I	62368	60781	61034	61403	59735	57770	76148	
a	% Change		-2.5	0.4	0.6	-2.7	-3.3	31.8	
c	Other	1765	1557	3362	4393	5890	7489		
a	% Change		-11.8	115.9	30.7	34.1	27.1		
d	Other	.	.	.	15869	17981	17597		
a	% Change					13.3	-2.1		
e	Other	.	.	.			56968		
a	% Change								

a) Vocational "Enrollment does not include Industrial Arts, Occupational Orientation/Pre-Voc Ed or Industrial Technology enrollments.

b) Data were not collected separately for this activity during 1982-83 through 1984-85.

c) Technical / beginning in school year 1988-89, these enrollments counted within T&I.

d) Occupational Orientation/Pre-Vocational Education
Industrial Technology

NOTE:

Data for service areas are for grades 9-12 and are verified for 1985-86 and beyond. High School Enrollments are nonduplicated. Vocational data are nonduplicated for the most part; however, some "overcounting" occurs in all areas as well as some duplication among Non-occupational Home Economics students.

ATTACHMENT 1
ENROLLMENT DATA SHEET
UTAH

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	44243 .	45147 2.0	45374 0.5	46867 3.3	50184 7.1	51760 3.1	51876 0.2	.
Vocational % Change	45225 .	45020 -0.5	39730 -11.8	35638 -10.3	41789 17.3	42876 2.6	45611 6.4	.
Agriculture % Change	5710 .	3863 -32.3	3902 1.0	4114 5.4	4326 5.2	3829 -11.5	4112 7.4	.
Business % Change	29601 .	28154 -4.9	27603 -2.0	31262 13.3	33573 7.4	35862 6.8	32869 -8.3	.
Health % Change	6146 .	1827 -70.3	2123 16.2	2296 8.1	2375 3.4	2698 13.6	3348 24.1	.
Non-Occ Hm Ec % Change	20050 .	17337 -13.5	19839 14.4	21560 8.7	24668 14.4	23943 -2.9	24848 3.8	.
Occ Home Ec % Change	4639 .	5263 13.5	4533 -13.9	4768 5.2	5087 6.7	5706 12.2	5728 0.4	.
Marketing % Change	10936 .	7380 -32.5	8335 12.9	8860 6.3	10471 18.2	10880 3.9	11981 10.1	.
Ind Arts % Change	3708 .	185 -95.0	680 267.6	11326 1565.6	13116 15.8	13674 4.3	13222 -3.3	.
T & I % Change	30841 .	24778 -19.7	25064 1.1	19823 -20.8	21637 9.2	22315 3.1	21916 -1.8	.
a Other % Change	. .	. .	. .	273 .	488 78.8	460 -5.7	1539 234.6	.
b Other % Change	. .	. .	. .	. .	. .	359 .	253 -29.5	.
Other % Change	. .	. .	. .	. .	. .	. .	. .	.

- a) Guidance
- b) Vocational Core

NOTE: All enrollment data include grades 11-12 only. High School Enrollments are nonduplicated. Some duplication exists in total Vocational Enrollment figures. All data for vocational service areas are duplicated.

ATTACHMENT 1
ENROLLMENT DATA SHEET
VERMONT

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	43344	43005	42500	41501	40281	42659	41340	41057
% Change	-0.8	-1.2	-2.4	-2.9	-5.9	-3.1	-0.7	
Vocational	6515	5122	5000	5126	4888	4471	4430	4046
% Change	-21.4	-2.4	2.5	-4.6	-8.5	-0.9	-8.7	
Agriculture	648	735	536	476	435	334	464	374
% Change	13.4	-27.1	-11.2	-8.6	-23.2	38.9	-19.4	
Business	1606	719	1216	1332	946	938	909	782
% Change	-55.2	69.1	9.5	-29.0	-0.8	-3.1	-14.0	
Health	503	250	172	158	173	117	141	168
% Change	-50.3	-31.2	-8.1	9.5	-32.4	20.5	19.1	
Non-Occ Hm Ec	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Occ Home Ec	758	325	579	607	648	547	525	499
% Change	-57.1	78.2	4.8	6.8	-15.6	-4.0	-5.0	
Marketing	356	306	355	342	337	356	361	384
% Change	-14.0	16.0	-3.7	-1.5	5.6	1.4	6.4	
a Ind Arts	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
T & I	2644	2787	2142	2208	2349	2179	2030	1839
% Change	5.4	-23.1	3.1	6.4	-7.2	-6.8	-9.4	
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.

a) Vermont does not collect data for these programs.

NOTE: All data are nonduplicated. High school totals are for grades 9-12. Vocational enrollments are for grades 11 and 12.

ATTACHMENT 1
ENROLLMENT DATA SHEET
VIRGINIA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	293012	291985	297906	302866	301679	294047	283156	283156 -3.7
Vocational % Change	347062	350955	347856	345380	337278	340492	414946	414946 21.9
Agriculture % Change	23078	21803	20716	20099	19029	19072	20875	20875 9.5
Business % Change	106037	116445	119762	120113	117720	114716	139778	139778 21.8
Health % Change	3333	3449	3361	2942	2913	2900	3106	3106 7.1
Non-Occ Hm Ec % Change	73451	71021	69303	67922	64361	67124	91024	91024 35.6
Occ Home Ec % Change	4704	4686	4782	4896	5188	5236	5344	5344 2.1
Marketing % Change	15050	14208	15068	15637	16020	16498	17187	17187 4.2
Ind Arts % Change	76750	76279	72065	70967	68761	71597	94294	94294 31.7
T & T % Change	33067	31139	30849	30378	31049	31148	30755	30755 -1.3
a Other % Change	8928	8826	8374	8789	8422	8191	8578	8578 4.7
b Other % Change	2664	3099	1576	3637	3761	3930	3898	3898 -0.8
c Other % Change	.	16.3	15.4	1.7	54	80	107	107 33.8

- a) Disadvantaged
- b) Handicapped
- c) Gifted (these programs were not offered prior to 1986-87)

NOTE: All data are reported to be nonduplicated counts for grades 9-12.

ATTACHMENT 1
ENROLLMENT DATA SHEET

WASHINGTON

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	232235 .6	234170 0.6	235955 2.3	242803 1.3	242159 -0.3	236683 -2.3	.	.
Vocational % Change	169689 .6	165505 -2.6	164971 -0.3	173217 5.0	186052 7.4	191134 2.7	.	.
Agriculture % Change	18242 .9	16989 -6.9	15625 -8.0	15917 1.9	16200 1.8	16116 -0.5	.	.
Business % Change	58742 .7	60893 3.7	62520 2.7	65313 4.5	72446 10.9	71872 -0.8	.	.
Health % Change	905 .3	776 -14.3	583 -24.9	683 17.2	615 -10.0	637 3.6	.	.
Non-Occ. Hm Ec % Change	56317 .5	52657 -6.5	50845 -3.4	52022 2.3	52986 1.9	54781 3.4	.	.
Occ. Home Ec % Change	1158 .4	1220 5.4	867 -28.9	1013 16.8	1027 1.4	1060 3.2	.	.
Marketing % Change	9323 .2	8559 -8.2	9124 6.6	10225 12.1	11790 15.3	12471 5.8	.	.
Ind Arts % Change	10245 .7	9764 -4.7	10691 9.5	11848 10.8	14041 18.5	16528 17.7	.	.
T & I % Change	11321 .5	10816 -4.5	11076 2.4	12069 9.0	12427 3.0	12559 1.1	.	.
a) Other % Change	3636 .4	3831 5.4	3640 -5.0	4172 14.6	4493 7.7	5065 12.7	.	.
b) Other % Change	.	.	.	.	27	45	.	.
Other % Change	.	.	.	.	.	66.7	.	.

- a) Diversified Occupations
- b) Technical

NOTE: All data are reported to be nonduplicated counts for grades 9-12.

ATTACHMENT 1 SHEET
ENROLLMENT DATA SHEET
WEST VIRGINIA

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	103607	99620	96559	99972	100059	104771	98586	98728
% Change	-4.0	-1.0	-1.3	0.1	0.1	4.7	-5.9	0.1
a Vocational	80576	82255	82507	85226	86073	75884	98385	.
% Change	2.1	0.3	3.3	1.0	-11.8	29.7	.	.
Agriculture	5945	5831	5820	5679	5661	5604	5622	.
% Change	-1.9	-0.2	-2.4	3.2	-4.4	-4.4	0.3	.
Business	25553	27352	29079	29761	29511	27976	31805	.
% Change	7.0	6.3	2.3	-0.8	-5.2	-5.2	13.7	.
Health	1369	1275	1264	1269	1276	1247	1315	.
% Change	-6.9	-0.9	0.4	0.6	-2.3	-2.3	5.5	.
Non-Occ Hm Ec	21493	21578	21297	23206	24767	24566	32753	.
% Change	0.4	-1.3	9.0	6.7	-0.8	-0.8	33.3	.
Occ Home Ec	1278	1245	1190	1212	1180	1163	1075	.
% Change	-2.6	-4.4	1.8	-2.6	-2.6	-1.4	-7.6	.
Marketing	3418	3265	3630	3469	3462	3519	3497	.
% Change	-3.9	10.5	-4.4	-0.2	1.6	1.6	-0.6	.
b Ind Arts	.	.	.	17876	16965	10480	20580	.
% Change	.	.	.	.	-5.1	-38.2	96.4	.
T & I	13614	12974	12172	12472	12445	11809	12328	.
% Change	-6.1	-6.2	2.5	-0.2	-5.1	-5.1	4.4	.
c Other	7657	8641	7974	7964	7494	6021	7125	.
% Change	12.9	-7.7	-0.1	-5.9	-19.7	-19.7	18.3	.
d Other	49	74	81	1394	77	140	865	.
% Change	51.0	9.5	139.5	-60.3	81.8	81.8	517.9	.
Other	.	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.	.

- a) Vocational Enrollment does not include Industrial Arts.
- b) Industrial Arts includes grades 7-12; data not available prior to 1985-86.
- c) Career Exploration
- d) Remedial

NOTE: High school data are nonduplicated; Vocational data are duplicated. All data (except Industrial Arts) are for grades 9-12.

ATTACHMENT 1 SHEET
ENROLLMENT DATA SHEET
WISCONSIN

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School % Change	211057	214264	203547	193571	190088	188100	.	.
Vocational % Change	141321	140941	132086	125670	128423	125593	-1.0	-2.2
Agriculture % Change	.	-0.3	-6.3	-4.9	2.2	.	.	.
Business % Change	59857	62956	61431	60537	57529	55020	-6.4	.
Health % Change	747	838	675	556	358	411	.	.
Non-Occ Hm Ec % Change	16020	15358	13607	14208	13492	12705	-14.8	-5.8
Occ Home Ec % Change	3002	3059	3106	2571	2762	3657	.	.
Marketing % Change	5687	5969	5769	6166	6828	6677	-2.2	.
Ind Arts % Change	.	5.0	-3.4	6.9	10.7	.	.	.
T & I % Change	46134	42773	39510	32673	38336	37952	-1.0	.
a Other % Change	984	-7.3	-7.6	-17.3	17.3	.	.	.
Other % Change	.	720	612	1615	2479	2647	6.8	.
Other % Change	.	-26.8	-15.0	163.9	53.5	.	.	.

a) Special Needs

NOTE: All data are reported to be nonduplicated counts for grades 9-12 (Vocational also includes some ungraded Enrollments).

ATTACHMENT 1
ENROLLMENT DATA SHEET
WYOMING

	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
High School	43106	43008	43855	44075	43176	42245	42013	
% Change	-0.2	2.0	0.5	-2.0	-2.2	-2.2	-0.5	
Vocational	46663	47979	49984	59006	62619	45322	43687	
% Change	.8	4.2	18.0	6.1	-27.6	7.4		
Agriculture	2206	2131	2516	2995	2329	2012	1958	
% Change	-3.4	18.1	19.0	-22.2	-13.6	-2.7		
Business	13832	15127	15800	20582	21495	14917	14889	
% Change	9.4	4.4	30.3	4.4	-30.6	-0.2		
Health	578	538	290	873	403	398	249	
% Change	-6.9	-46.1	201.0	-53.8	-1.2	-37.4		
a Non-Occ Hm Ec	11100	10986	11158	11166	14347	11104	11864	
% Change	-1.0	1.6	0.1	28.5	-22.6	6.8		
Occ Home Ec	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Marketing	2024	1647	2172	3997	1429	1264	1503	
% Change	-18.6	31.9	84.0	-64.2	-11.5	18.9		
Ind Arts	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
b T & I	16923	17550	18048	19395	22616	15627	16504	
% Change	3.7	2.8	7.5	16.6	-30.9	5.6		
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
% Change	.	.	.	.	.	.	.

a) Non-occupational Home Economics Enrollments only; does not include Occupational Home Economics.

b) T&I includes Industrial Arts Enrollments, except in school years 1985-86 and 1986-87.

NOTE: All Enrollment data are for grades 7-12. High School Enrollments are nonduplicated; Vocational data are duplicated.